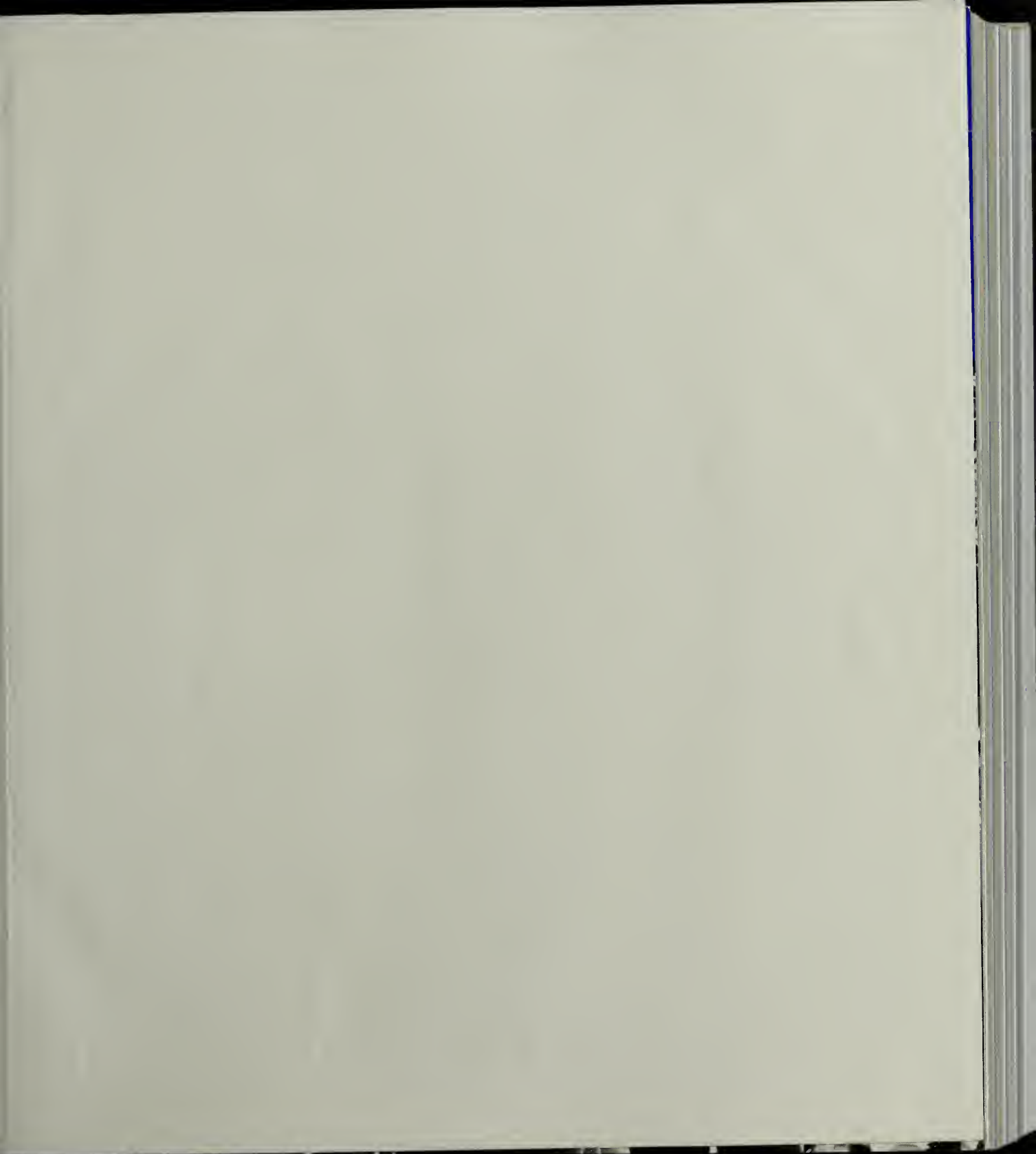
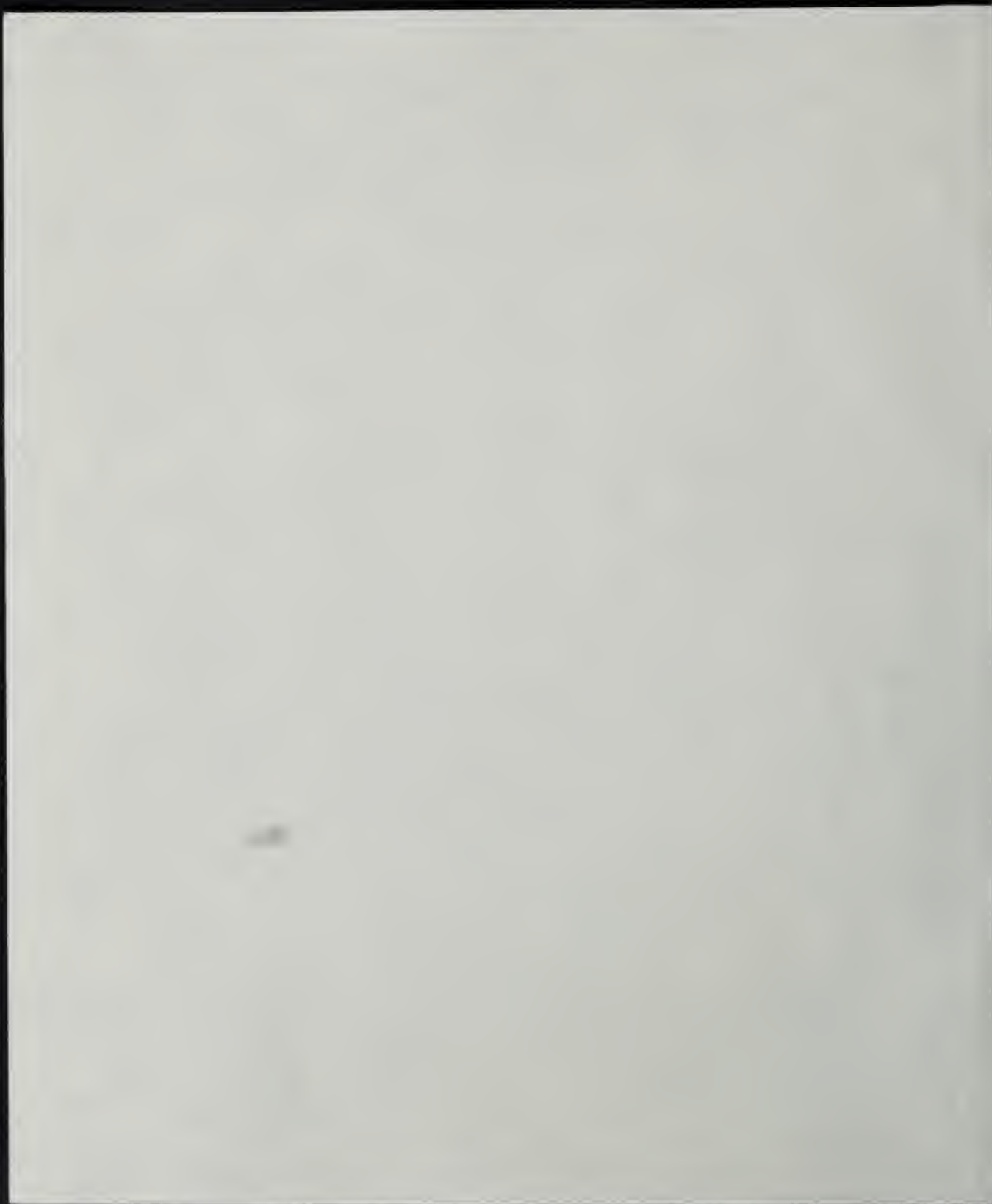
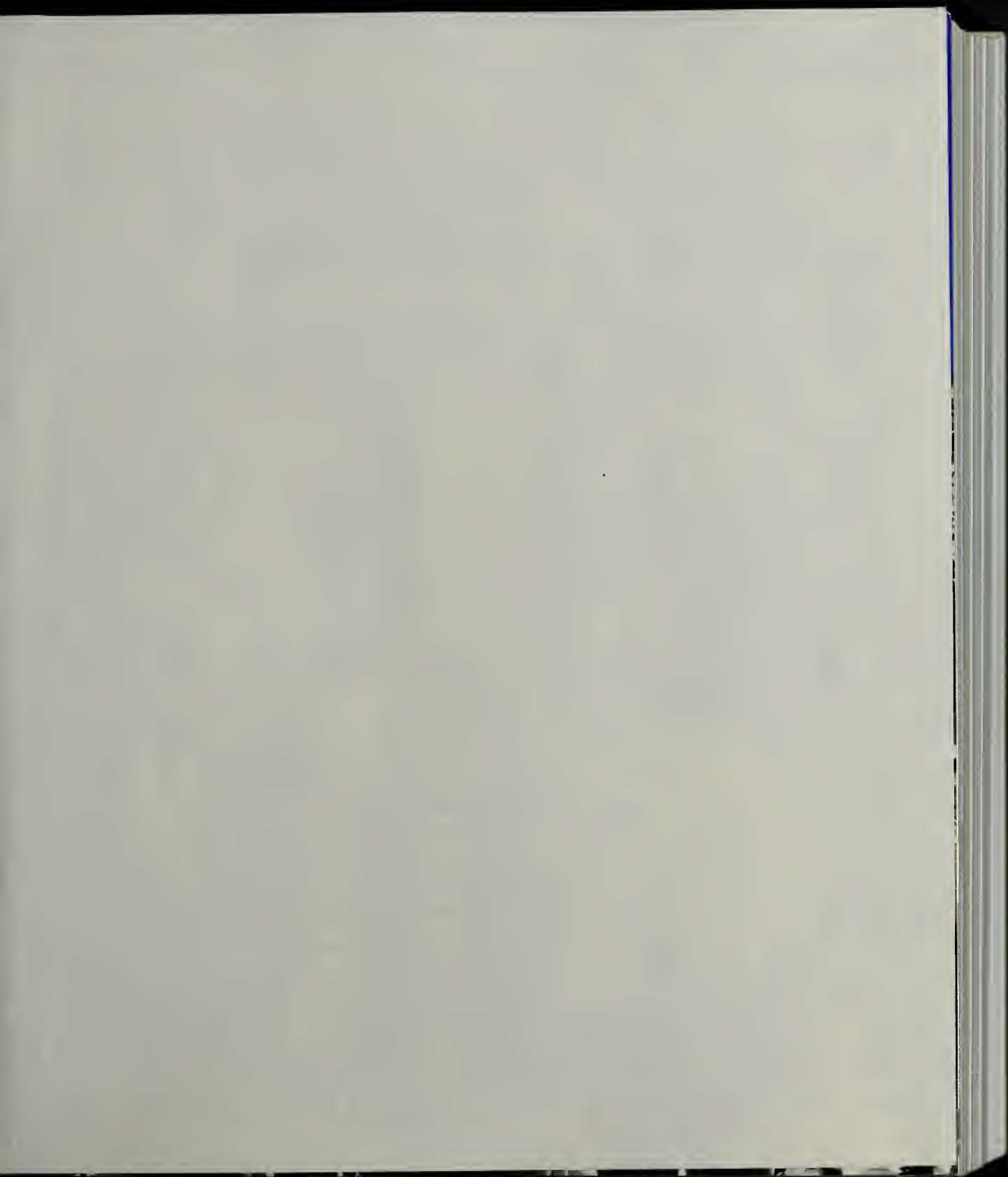
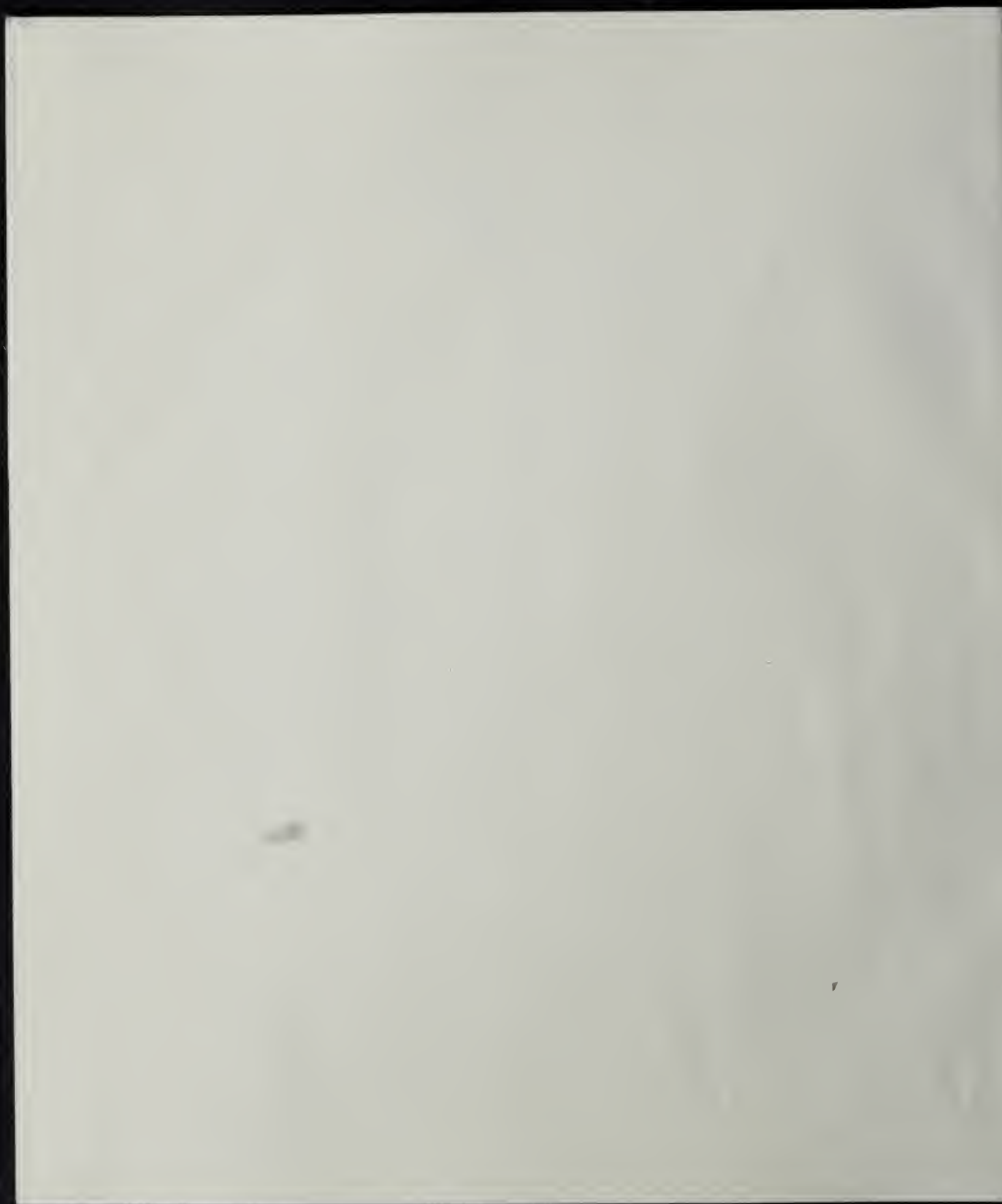












Andover

Catalog 1982-83



The material in this catalog is intended to provide general information concerning Phillips Academy, Andover, rather than a complete record of any one year. It is not in any manner contractually binding, and the information herein is subject to revision and change.

Andover

Catalog



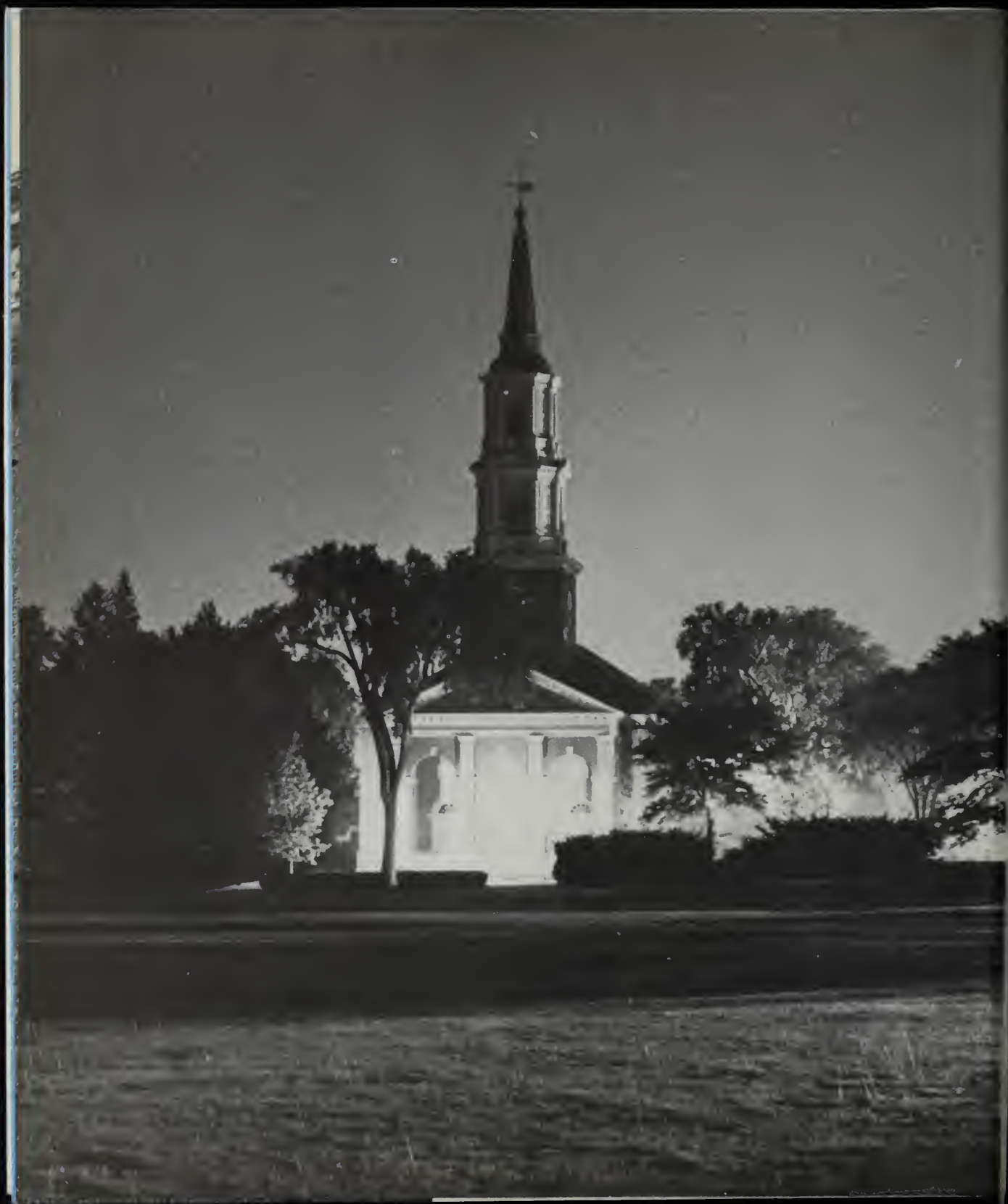
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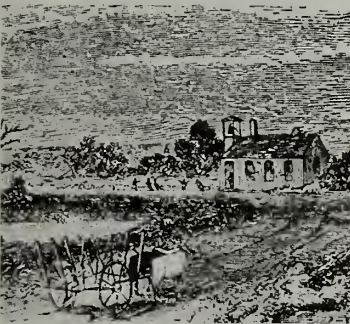
Phillips Academy,
Andover, Massachusetts,
better known as Andover,
is an independent,
coeducational, integrated
and non-sectarian
institution offering a
variety of academic
programs for high school
students.

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Introduction to Andover



Phillips Academy in 1778

In 1789 the first scholarship monies are recorded, from John Phillips, "in consideration of further promoting the virtuous and pious education of Youth, (poor children of genius and of serious disposition especially) in Phillips Academy, founded in Andover, Massachusetts."

When Phillips Academy opened in 1778, midway through the American Revolution, there was little reason to feel that the future held bright promise. The war with England was going badly. There was as yet no stable government for the new American nation, nor any surety that stability and social order would return after the revolution. Yet these very dangers convinced twenty-six-year-old Samuel Phillips, Jr. that just such a venture as the Phillips School was required to educate wise and pious leaders for the new nation. For, as he wrote: "Upon the sound education of children depend the comfort or grief of parents, the welfare or disorder of the community, the glory or ruin of the state." Young Phillips (who also was making gunpowder for Washington's army) convinced relatives and friends to put up money and land, and he drafted the Constitution for a school to train the minds and morals of youth for leadership and service. It was to be a sturdily democratic school, for the Founders set this mandate in the Constitution: "This Seminary shall be ever equally open to youth, of requisite qualifications, from every quarter." On April 30, 1778, thirteen pupils met Master Eliphalet Pearson in a refitted carpenter's shop on our Andover campus. Phillips Academy had begun.

Andover today has grown from thirteen boys to twelve hundred boys and girls, from one rude shed to a campus of many acres where extraordinary modern facilities mix with school buildings more than one hundred and fifty years old. Yet the educational values of Andover, even its governance, remain strikingly close to those set forth by the founders. The insistence on academic excellence and moral education, and a diverse student body drawn from able "youth from every quarter," are ideas as appropriate today as in the Revolutionary age in which they were conceived.

In 1973 neighboring Abbot Academy, (est. 1829), one of the nation's oldest and most distinguished girls' boarding schools, was merged with Phillips. After nearly two hundred and one hundred fifty years, respectively, of single-sex education, the two historically linked academies joined their adjacent campuses and educational strengths to effect a single coeduca-

tional academy. The gratifying success of the decade of coeducation, and during that time the Academy's 200th birthday celebration, have made Andover and its academic program known to an increasingly widespread public.

We serve some two thousand young people, most between fifteen and eighteen years of age, at the Academy during the course of a calendar year. Some twelve hundred students are at Andover during the traditional school term for periods up to four years. Over eight hundred more spend the summer with us in the Andover Summer Session or various programs and institutes under its umbrella. While the students in our day are drawn from a narrower age group than earlier — Eliphalet Pearson faced both a six-year-old and a thirty-year-old in his first class in April of 1778 — their hopes and worries, many of the decisions they face, even their pranks, are timeless.

It should be a privilege to attend Andover, but Andover should not be a school of privilege. We are committed to enrolling able students from all economic levels, from every racial, religious and ethnic entity, "from every quarter" of American life, and from foreign lands. Our *Constitution* bids us do this. Andover is no single group's sanctuary. In a day when many Americans, by their actions, are rejecting even the ideology of the melting pot, we assert it.

Andover is a residential school, a twenty-four-hour learning community. This allows us to draw young people from across neighborhood lines, across state and national boundaries. Young people learn from peers as much as from teachers, particularly in a setting where there is no disjuncture between classroom and street, between school and home. Class, racial, religious and geographic diversity enrich a school and bridge over the divisions that rend national and international life. We presume to forward the learning of leaders here, and leaders in our day must understand racial, social, national and religious differences, and see for themselves how significant is the unity in humanity.

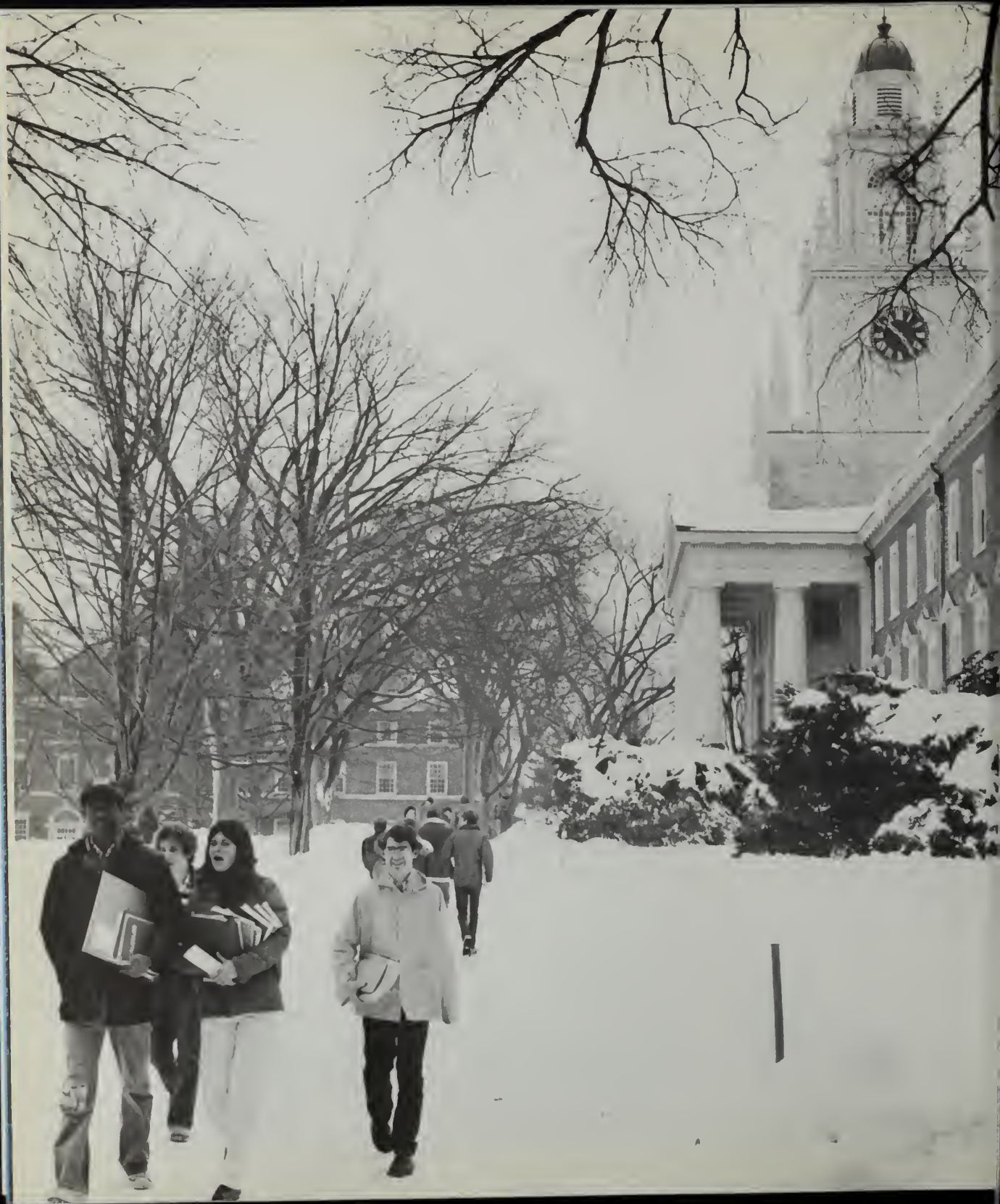
Andover is well equipped to provide for students whose interests and abilities are primarily in the academic realm, in the traditional liberal curriculum. We believe that the core of this tradition is sound. When taught with high expectations and global perspective, this liberal arts core provides the basis for public and moral leadership.

In a school the principal means to achieve these ends are decent, free and talented teachers. Andover's teachers are strong personalities, individuals of energy and well-considered values, instructors whose work is in the classroom, and also on the playing field, in the dormitory, in the dining hall — in short, across the full range of places where both adult and young person meet. American education is moving

away from such a model of teacher. In the mistaken belief that "efficiency" will result, teaching is broken into mechanistic bits. Andover makes a stand for the other, older tradition, for whole teachers who are concerned about whole pupils, their struggles and joys, their bodies and souls as well as their brains.

The adolescent years are the crucial time for success in education, those years when young people learn much about themselves, establish their personal goals and visions for the future, and build the courage to lead, to march to the tune of a different drummer. Now we at schools are educating the leaders for the 21st century. We must help them achieve the habits of excellence, broad understanding and a commitment to service. Like the founders of this school, we take youth, and adolescent education, seriously. For as they wrote in our school Constitution more than two hundred years ago: "Youth is the important period, on the improvement or neglect of which depend the most important consequences to individuals themselves and the community." For the young people who join our Andover school community, we want it to be a challenging, constructive and joyful experience.





Andover Life

A Beginning



In 1782 Paul Revere was commissioned to make the Phillips Academy seal. Revere engraved the educational faith of Andover's founders — "The end depends upon the beginning" — around the symbols of the rising sun and the hive of industrious bees. The founders' religious and patriotic commitment to the common good is symbolized by the second motto, "Non sibi" — "not for one's self."

A Purpose

Phillips Academy opened for instruction shortly before the Continental Army marched out of Valley Forge and, in one sense, the school and the nation have grown up together. Paul Revere engraved Andover's seal; John Hancock signed its Act of Incorporation, and George Washington sent his nephews here to study. Samuel F. B. Morse and Oliver Wendell Holmes were students of Principal John Adams. Harriet Beecher Stowe lived and worked at Andover; she is buried in the Academy cemetery, and her home is now a dormitory. "America" was written on Andover Hill in 1832. For over two centuries we have sought to develop sound scholarship, character and self-reliance in our students, as well as a commitment to work for the good of the nation and mankind.

If you come to Andover today, you won't have to go far to see a building designed by Charles Bulfinch or one named for Nathan Hale. You will take classes in a modern arts and communications center, an archaeology museum and in buildings dating back to the War of 1812. You might live in a dormitory constructed in 1808 or one built in 1973. Your next door neighbor might be from Texas or the People's Republic of China. You might take Greek and advanced computer programming, or Russian and astronomy. You might learn how to play squash, discover what it's like to work for a radio station or how to run rapids in a kayak or canoe.

The opportunities are here.

The Phillips Academy faculty, meeting in the winter of 1979, adopted the following as a statement of goals and intentions:

Phillips Academy is committed to providing a rigorous academic education for qualified "youth from every quarter," as stipulated by our Constitution, and to helping students develop the skills and values necessary for personal fulfillment and a significant contribution to society. The Academy strives to meet this commitment in several ways: recruiting aggressively and welcoming qualified and prom-

Always speak to an Andover man on the street, whether you know him or not. All cheering is under the direction of the cheerleaders. Individual cheering is not allowed. New men are expected to have the songs and cheers perfectly learned by the end of the first two weeks. It is not good form to cut or mark school furniture. Try to keep enlarging the number of your acquaintances, but be slow to make intimate friends.

Selections from 1920's rule book, *Customs and Points for New Men*



ising students from a wide range of ethnic, economic, and geographic backgrounds, in the belief that diversity itself can be an enriching component of education; providing a strong curriculum in intellectual and artistic disciplines to cultivate a vision of man's potential as well as an understanding of his accomplishments, and to establish a basis for further exploration and perhaps eventual specialization; offering a diversified program in competitive athletics and physical education to foster physical agility, endurance, and resilience, as well as an appreciation of physical achievement and the notions of play and sportsmanship; developing a program in health to promote an understanding of and respect for physical and emotional well-being and to encourage sound health habits; encouraging the study and exercise of religious beliefs, as a means of spiritual nourishment; offering experiences in leadership within the community, in order to develop responsibility, resourcefulness, and social concern; and providing innovation and a measure of leadership in secondary education, a responsibility dictated by our combination of independence, resources, and tradition.

The Place

The school is located on a hilltop in the town of Andover, a 45-minute bus ride from Boston and Cambridge. It is well situated for easy access not only to the historical, cultural and entertainment offerings of the Greater Boston area, but to the beaches and mountains for which northern New England is justly renowned.

Phillips Academy was the first boarding school to be incorporated in the United States (1780). During its more than two centuries the school has grown in size from a single rude building and a few acres of land to an extended campus of 160 buildings on over 500 acres.



The People

Students

There are approximately twelve hundred students in Andover's regular session, about forty percent girls, sixty percent boys. Day students comprise one-fifth of the enrollment. More than eight hundred others attend the various programs and institutes of the Academy's Summer Session.

Andover students come from every walk of life, from virtually every state in the union and from more than twenty foreign countries. They are divided into four classes: Seniors, Upper Middlers, Lower Middlers and Juniors — our traditional terms for 12th, 11th, 10th and 9th graders. Some are here for four years, most for a shorter time, but they all have two things in common: intelligence and the willingness to use it.

Faculty

The faculty number approximately two hundred; over half hold advanced degrees at the master's level or higher. The power of an Andover education flows directly from their scholarship and classroom teaching.

Andover asks much of the men and women who teach here: although the heart of the work is in the classroom, tradition calls for the teacher to serve simultaneously as House Counselor or student advisor, coach and part-time administrator. Andover teachers are accessible to students in the dormitory, in athletic endeavors, in extracurricular activities; they share an abiding interest in the growth of young people and a willingness to become directly involved in that process.



A year, a week, a day

Andover operates on a trimester system, offering about 290 separate courses that vary in length from one trimester to the full year. The year begins in late September and ends in mid-June, with breaks at Thanksgiving, Christmas and in the early spring.

Classes are held on Monday, Tuesday, Thursday and Friday, the full class days, and on Wednesday morning and every other Saturday morning.

Wednesdays and Saturdays are half holidays with no afternoon academic appointments. On alternate Saturdays there usually are no morning classes and Sunday is totally free. This flexible weekly schedule provides time for independent study, for special projects, for informal sports, shopping in Andover or trips to Boston, the beach or the mountains. Social events during the week are limited by the demands of the academic program, but the weekend program on campus includes dances, concerts, movies, plays and informal activities.

Participation in athletics is required of all students, and athletics and activities are scheduled four afternoons a week for two hours each. On Wednesday and Saturday afternoons, varsity and junior varsity teams often participate in interscholastic competition.

Meals are served in Commons, our fifty-year-old central dining hall, composed of four handsome, traditional dining halls and two completely modern serving areas. The cost of meals is included in the fees of both boarding and day students.

The Daily Schedule

7:15 a.m.	Commons opens for breakfast
8:00 a.m.-	Five 50-minute morning Class Periods. A student is likely to have four morning classes, each meeting four or five times a week.
1:00 p.m.	
11:00 a.m.-	
1:30 p.m.	Lunch at Commons
1:45 p.m.-	
3:45 p.m.	Sports
4:10 p.m.-	Two afternoon Class Periods: most students have one afternoon class.
6:10 p.m.	
5:15 p.m.	Commons opens for supper.
6:45 p.m.	Evening activities: Chorus rehearsal, Drama Lab plays, club meetings, etc.
8:00 p.m.	Evening Study begins
10:00 p.m.	Students in own dorm

An individual student is likely to have one morning period and one afternoon period free each day, depending on course and laboratory schedule.

Most students are eligible to take a day excuse each week and, after the first two weeks of the year, overnight excuses beginning after their last scheduled weekly appointment.

Course work is intensive and involves about twenty-five hours of outside preparation each week. Required athletics or afternoon activities total approximately six hours each week. In addition, all students are required to participate in the school's work program, performing assigned tasks, supervision or leadership responsibilities two hours each week. Despite the amount of time that must be spent on academic pursuits, most students become very involved in extracurricular activities and social events. The school encourages independence and personal responsibility: there are study hours but no study halls, and decisions about the use of one's time are largely left to the judgment of the individual.





Residential Life



Dancing was forbidden in the 1820's, "and when a rash Frenchman proposed to start a dancing academy in the town, the Principal [John Adams] did his best to have him summarily ejected by the village fathers."

Claude M. Fuess, *An Old New England School*

Dorms and Clusters

Boarding students live in dormitories with faculty House Counselors and their families. Although these buildings vary in size and house from four to twenty-four students, all are small enough to encourage close relationships among students and between students and House Counselor. One-third of the students live in single rooms; two-thirds have one or two roommates. Rooming arrangements vary from large one-room doubles to three-room suites; large dorms are likely to have students from at least three classes.

For many students, dormitory life is one of the most valuable aspects of their time at Andover. Whether it's planning a pancake breakfast or studying for a history mid-term, sharing it with people from very different backgrounds or from foreign lands is a rewarding learning experience.

Dormitories are grouped into six geographical units called "Clusters," each including girls' and boys' dorms, about two hundred students from all classes, and twenty to thirty faculty families. Clusters create the personal atmosphere of a small community in which everyone knows everyone else and people do most or many things together. The Cluster System is the heart of Andover's residential life, bringing the advantages of a small school to an institution that already has the advantages of size.

The Clusters have considerable independence; teachers and students together manage their own affairs under the leadership of a Cluster Dean. Each Cluster has its own student officers, discipline system, intramural athletics and informal social activities.

Clusters are responsible for administering much of the student work program, which is designed to develop a sense of community responsibility for the daily operation of the school. It also assists the school in reducing its expenses. Working a minimum of two periods a week, students share the jobs of returning books to library stacks, operating audio-visual equipment, serving as office helpers, messengers, laboratory assistants, and performing other essential tasks. Other students are responsible for the daily care of dormitories, while all residents of a given dormitory are responsible for keeping its entries free of litter and snow.

The Clusters take turns each week working in the dining hall, Seniors serving as overseers. Seniors have many other supervisory roles, including Cluster and School offices, editorial positions on school publications and other assignments which are of service to the Phillips Academy community.



Counseling and Discipline

Those who are not accustomed to a residential school may at first be surprised by the degree of independence an Andover student has; on the other hand, they may be surprised by the existence of rules and procedures necessary to protect the rights of individuals and to enable the school to achieve its ends. Existing rules have a dual purpose: to preserve the necessary order in the community so that effective learning can take place, and to teach students that individual freedom can be achieved only through due consideration for others. The school tries to keep rules to a minimum. Incoming students and their parents are provided with a copy of the *Academy Blue Book*, summarizing rules and regulations; all students are held responsible for its contents.

Each student has a faculty House Counselor who lives with his or her family in the dormitory and who is available for advice and assistance. This faculty member works closely with students in the dormitory on both the personal and academic level and parents can expect to hear from the House Counselor at regular intervals. Parents are encouraged to turn to the House Counselor for information regarding a student's progress.



Each Cluster Dean supplements the work of the House Counselor and is available to students and parents for information and advice. Other support staff include academic advisors, who help students in the Cluster plan their academic programs, and the College Counseling Office, which assists all Seniors with their future educational plans.

Graham House serves the community in several ways. The staff offers psychological counseling, study counseling, study skills courses, student tutorial services, the Psychology Department curriculum, consultation to faculty and staff, and specialized workshops in response to residential needs.

Discipline is handled at the Cluster level and involves the Cluster Dean, House Counselor, other faculty and student representatives. Offenses involving a student's integrity, social offenses that threaten the well-being of other individuals or the school community, and continued infractions that indicate an unwillingness to come to terms with the demands of the school — all render a student liable to dismissal. Cluster recommendations for suspension or dismissal are made to the Headmaster, who makes the final decision. Examples are dishonesty, the possession or use of alcoholic beverages or illegal drugs and unauthorized absence from school bounds. Students may not possess, rent or drive any motor vehicle within school bounds; bicycles are permitted. Andover does not allow smoking, unless students have completed a school-administered course on the health hazards involved and have parental permission.

In a community such as Andover, all must commit themselves to the goals of the community and to loyalty to each other. Since education at Phillips Academy is both intellectual and humane, students and faculty derive mutual support from sharing of themselves and their ideals.

Trust and responsibility have many interpretations; these words have become hackneyed from overuse and misunderstanding. But the ideas they embody — sensitivity to others, willingness to explore and respect differing points of view, charity and humility in expressing judgment, readiness to cherish friendship, to depend and to be depended upon — are nonetheless fundamental. Such values can scarcely be legislated and can only be imperfectly defined. Yet the health and happiness of everyone in the community depend on consideration and awareness, restraint and candor, discretion and shared joy. Collaboration toward these imprecise but worthwhile ends is an expectation which all at the Academy hold.

Only boys and girls who feel that they can live happily with the rules and guidelines of Phillips Academy should apply for admission.



In the early 1930's Abbot alumnae parents tried to persuade Principal Bertha Bailey to abandon the required long black stockings worn with the girls' gym bloomers. To this request she steadfastly refused: "I don't like legs."



Harriet Beecher Stowe, author of *Uncle Tom's Cabin*, and her husband, a Seminary professor, lived in Stowe House. She is buried in the school cemetery. Mrs. Stowe shocked the strict Congregationalist community by giving parties and entertainments for students, was suspected of going to the theater and even of having "Episcopalian leanings." Claude M. Fuess, *An Old New England School*

The Campus Ministry

Philips Academy is committed to an ecumenical ministry that represents the Protestant, Roman Catholic and Jewish traditions and seeks to be responsive to the spiritual needs of the school. The school chaplains teach in various fields and have the additional responsibilities of worship services and of pastoral counseling. Andover students come from various religious traditions; some have no religious affiliation. The school wishes actively to support religious communities within the institution and hopes that a less formal but more focused approach to the spiritual life of the school will encourage other teachers and students to active participation and leadership.

Worship services are available for all who wish to participate. A Protestant interdenominational service and a Roman Catholic Mass are held on Sundays; the Jewish congregation has services regularly on Friday evenings.

Activities

Extracurricular activities are an important aspect of a student's education, and Andover offers a rich fare, thanks to the diversity of interests in the student body. From the Pre-Med Club member to the Model Railroader, it seems that all Andover students do something special in their free time.

Many of the activities are service-oriented; the Community Service Program places student volunteers in area nursing homes, elementary schools, youth centers and other agencies. Closer to home, the Tour Guide Association handles the responsibility of conducting campus tours for the Admissions Office. Older students who are members of the Tutorial Program offer help to fellow students in academic difficulty. The student radio station, WPAA (91.7 on your FM dial), is on the air from 6:30 a.m. to 11:30 p.m. daily, serving the local listening area as well as the student body. *The Phillipian*, the Academy's prizewinning student-run weekly newspaper, is wholly uncensored; students lay out the paper and do their own typesetting, as well as write the articles and headlines. *The Pot Pourri*, the school yearbook, and the school literary magazine, *The Mirror* (Robert Frost was an early contributor), provide more opportunities for those with a literary bent.

Cultural organizations include the Afro-Latino-American Society, the Asian Cultural Society and others; course-related groups range from the Astronomy Club to the Russian Club. The Chapel Council, the Newman Club and the Jewish Student Union support the "team" ministry in providing active religious communities for Andover students.

At any time during the week, actors and directors will be

working on a main stage play or on a student production in the Drama Lab; the Andover Student Political Union may be listening to a State Department official discuss the Middle East; the Natural History Club may be birdwatching on an ocean beach or — if the season is right — the Ski Club may be on its way to the White Mountains of New Hampshire.

Many students make extensive use of school facilities in their free time, whether or not they are affiliated with a club or organization. The Arts Center is a major focus of school life — darkrooms are used almost around the clock, and students and faculty interested in painting, metal sculpture, ceramics or design make use of the center's studios and workshops in their free time. The Music Department also provides facilities for students interested in pursuing music beyond the classroom.

There is no limit to the variety of extracurricular activities at Andover. Students who do not find an existing club or organization that meets their needs are encouraged to start one.

Undergraduate Organizations (Clubs)

Afro-Latino-American Society
Andover Student Political Union
Asian Cultural Society
Astronomy Club
Athletic Advisory Board
Backgammon Club
Band
Blue Key
Brass Choir
Bureau of Tutoring
Cantata Singers
Caucus (Af-Lat-Am publication)
Chamber Music Society
Chapel Council
Cheerleaders
Chess Club
Chorus
Coin Club
Day Student Union
Drama Workshop
Dungeon and Dragon Society
Duplicate Bridge Club

Eagle Scout Post 107
EAT (Environmental Action Team)
Eidolons (student photography publication)
Fidelio (madrigal singing society)
French Club
German Club
Health Food Club
Jazz Band
Jewish Student Union
Math Computer Club
The Mirror (literary magazine)
Model Airplane Club
Model Railroad Club
Muse
Natural History Club
Newman Club
Orchestra
Outing Club
The Phillippian (weekly student newspaper)
Philomathean Society (debating society)

Pot Pourri (yearbook)
Pre-Law Society
Pre-Medical Society
Press Club
Psychology Club
Radio Broadcast Association (WPAA-FM)
Russian Club
Sailing Club
Ski Club
Social Functions Committee
Spanish Club
Stage Crew
Stamp Club
Student Guides
SUMOP (Summer Job Opportunities)
Table Tennis Association
United Nations Club
Western Union
Women Students' Union
Young Democrats





Educational Resources

The Oliver Wendell Holmes Library

At the center of Andover's intellectual life is the 102,000-volume Oliver Wendell Holmes Library, named after the famous doctor and poet who was a member of the Class of 1825. The stacks are open to students. In addition to academic work, students and teachers use the library to explore new fields of interest and to read casually.

The library subscribes to over 260 American and foreign periodicals and daily papers from cities throughout the country. A microfilm file of *The New York Times* is available. Particular library treasures are the Jansson Atlas, printed in Amsterdam in 1657, papers and books of Oliver Wendell Holmes, and one of the world's leading collections of Vergiliana.

The Addison Gallery

The Addison Gallery of American Art operates both as a museum in the traditional sense and as an art center for the school and the community. In addition to organizing exhibits of American art from the collection, the museum staff originates exhibits of contemporary painting, sculpture, photography, video, film and crafts. Seminars bring artists in close contact with students to discuss contemporary art issues. In cooperation with Phillips Academy's Music Department, concerts by faculty and students are produced in the museum.

The holdings of the museum are recognized as a distinguished specialized collection: Allston, Copley, Morse, Stuart, West and others represent the Colonial period. Of special importance among the many paintings of the nineteenth century are examples by Cole, Doughty, Eakins, Homer, Inness, LeFarge, Ryder, Twachtman and Whistler. The early part of the present century is shown in the work of Bellows, Davies, Demuth, Hassam, Hopper, Luks, Marin, Prendergast and Sloan. Contemporary artists are represented by works of Calder, Lippold, Moholy-Nagy, Hofmann, O'Keeffe, Pollack, Shahn, Wyeth and others.



Respice Artem Patriae

"Respect the art of your country", was the admonition of Thomas Cochran, founder of the Addison Gallery of American Art 51 years ago, before New York was an international art center and when a museum dedicated to American art was still a novelty. Founded in the hope that "if Andover students could be surrounded by beautiful things, their lives would be immeasurably enriched", the gallery and its collections have fulfilled this vision.



The Robert S. Peabody Archaeology Museum

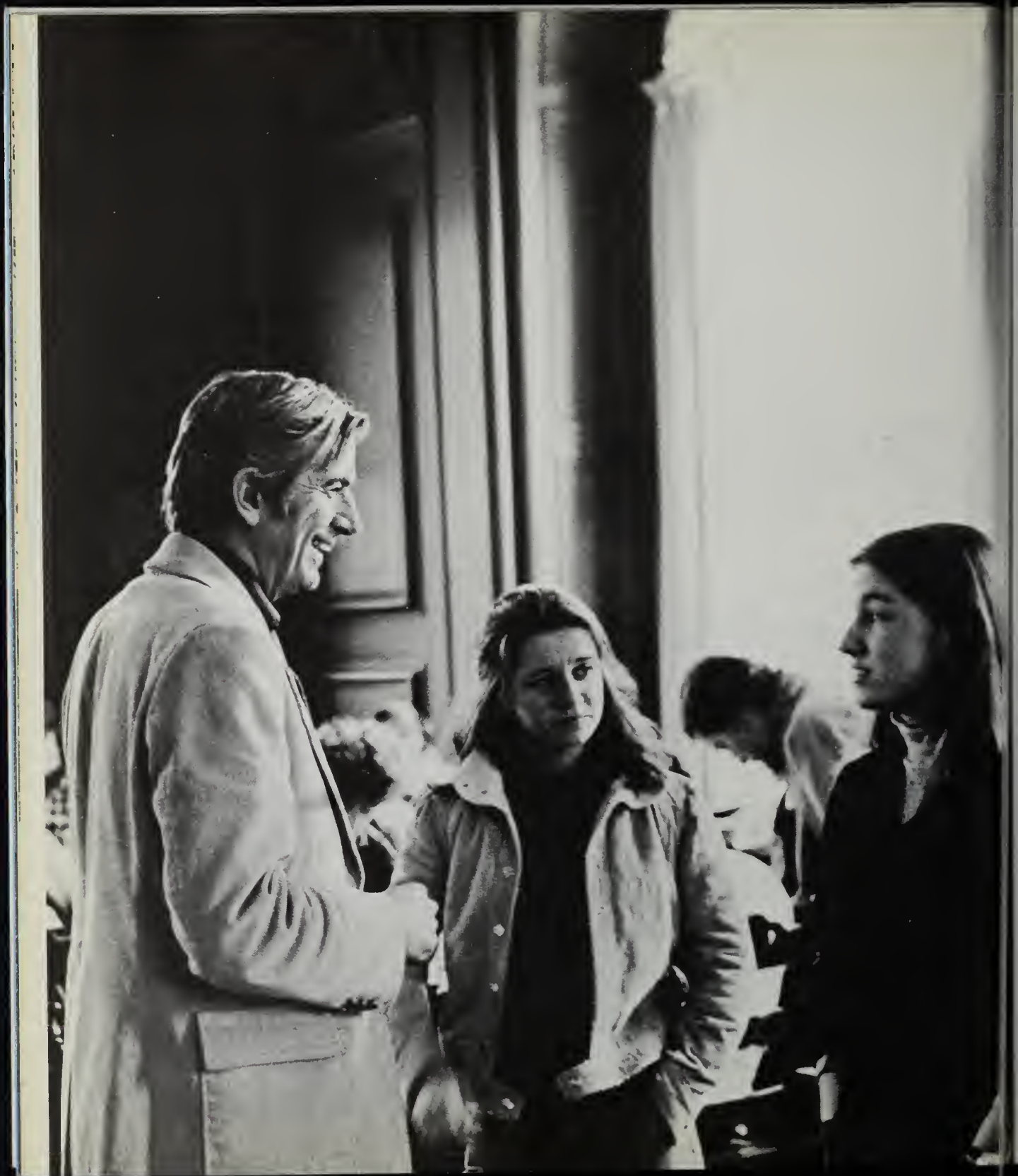
The Robert S. Peabody Foundation for Archaeology has conducted major archaeological research in this hemisphere for the last seventy-five years and has published many reports of its scientific investigations. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas. The laboratories of the museum are used in teaching and illustrating the Foundation's research. Mature students may undertake special study projects which involve the use of the Foundation's collections and library resources.

Current research is concerned with the origins of agriculture and with the concomitant rise of civilization in the New World.

The Cochran Sanctuary

The Moncrieff Cochran Sanctuary is a sixty-five-acre tract of rare beauty located so close to the center of school activity that it is in fact an extension of the campus. Landscaped areas planted with dogwood, azalea, rhododendron and laurel provide a succession of bloom that draws many visitors from late April to mid-June. A brook and two ponds attract nesting ducks and geese, and extensive natural wild areas, varied in terrain and plant life, provide nesting places for many species of land birds. Cross-country runners and skiers make extensive use of the Sanctuary, as does the Academy's Search and Rescue program.





The Academic Departments

The Curriculum

The curriculum of Phillips Academy contains both a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical. All departments offer courses beyond the level of preparation for college.

Classroom groups are small enough to permit individual attention; the average class size is fourteen. Students are placed in sections fitted to their attainment and, through accelerated sequences and advanced courses, are encouraged to progress at a rate commensurate with their ability and ambition. Many students fulfill requirements ahead of the normal year, increasing their choice of college-level courses and other elective opportunities. Andover's trimester system provides flexibility and variety in the curriculum and allows various combinations of independent work and off-campus projects.

Every student is assigned to an academic advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements and the student's particular interests. With the approval of the academic advisors and House Counselors, students may select their instructors, class times and sections during the Arena Day preceding each trimester. However, the school cannot guarantee that all students will be able to have their desired selections.

The curriculum and diploma requirements are described in detail in the *Course of Study*, which will be sent upon request to each preliminary applicant and to others who would like to receive it.

THE ARTS



When Humphrey Bogart flunked out of Andover in 1918, it was not from lack of ability, his teachers agreed. Headmaster Alfred Stearns wrote to Humphrey's father, a classmate of Stearns: "The boy is all right at heart and is bound to come out on top."

Visual Arts

At the heart of the art program is a concern that all students learn to see freshly and accurately, that they learn how to organize their efforts to make something happen, that they develop a critical eye for the coherence of their environment, all these with an independent mind.

The diploma requirement in art is as follows: Juniors and new Lower Middlers must take a trimester course in studio art; an entering Upper Middler must take a trimester course in studio art or music. Andover attempts to balance structured, problem-solving courses like the basic Visual Studies, with more adventurous advanced courses, organized around longer-term projects. For a student who desires several terms in art or design, the courses are here, whether the student's objective is a professional school, Advanced Placement in a liberal arts college, or simply a strong basis in a traditional area of general education.

The superb facilities of the Arts and Communications Center — fully equipped wood and metal shops, two complete photo labs, print-making equipment, painting and drawing studios, a kinetics studio — are supplemented by the several kilns available to ceramicists. The department welcomes extracurricular use as well as work related to courses, and faculty members are on hand every evening to encourage the idea that whether it's painting or bicycle repair, the Arts Center is the place to go.

Theatre and Dance

Courses in theatre are designed for students who seek formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work on plays. A variety of experiences is available; some courses are performance oriented; some are theory oriented; some are both. All combine classroom and workshop sessions; students work out practical theatrical problems together under the guidance of an instructor. Dance may be taken as a course or as an activity.

George Washington Hall, capable of handling audiences of one thousand, includes a flexible, professionally equipped proscenium stage. It has a full fly system, accommodation for numerous



lighting instruments and an elevator/pit. Recent main stage productions have included *The Me Nobody Knows*, *Cabaret*, *The Time of Your Life*, *Twelfth Night*, *Macbeth*, *Our Town*, and *Camelot*.

The Drama Lab, also in George Washington Hall, is a "black box" — an intricate arena/workshop with excellent lighting facilities, suitable for audiences of not more than seventy-five. Although main stage plays are usually directed by a member of the faculty, the Drama Lab allows students to direct plays themselves and to experiment with dramatic styles. A sample of productions from recent years includes plays by Albee, Ionesco, and Pinter but original student work is also performed here.

Theatre students are encouraged — but not required — to supplement their classwork by participating in any of the numerous productions mounted each year; anyone may audition for the Andover Touring Company, for several years part of an exchange program with schools in England, touring with such plays as *Our Town*, *The Fantasticks*, *Scenes from American Life* and *Godspell* during spring vacation.



Music

The Music Department faculty consists of five full-time and several part-time instructors. Other highly qualified instrumentalists are available to teach voice, piano, organ, classical guitar, brass, percussion, strings, and woodwinds.

Andover offers courses for the beginner as well as for intermediate and advanced students both at the applied level (study of musical instruments or playing in a musical organization) and in the history, appreciation, and theory of music. An entering student who has not had the opportunity to learn to play may join a class to study an orchestral instrument. He or she may also, for a nominal fee, study privately.

The Nature of Music, or Music 20, is the diploma requirement in music, and a prerequisite for most courses in the history, appreciation, and theory sections. A more advanced three-part course, Theory of Music, runs in sequence throughout the year.

Graves Hall, the department's newly renovated home, has large rehearsal halls for the Concert

Band and the String Orchestra, many individual practice and ensemble rooms, one music classroom, teaching studios and an electronic music studio. The department also has a large, up-to-date record library and listening room. The Chorus has a fully equipped rehearsal room and a library of music literature in the Cochran Chapel, a short distance away. The Chapel also houses two new Andover organs for the use of beginning and advanced organ students. One is located in Kemper Chapel; the other, in the main chapel, is a 30-stop, double manual, tracker action instrument.



VISUAL ARTS

Introductory Studio Courses

Visual Studies

Visual Studies for Juniors

Introductory Ceramics

Introductory Photography

Intermediate Studio Courses

Visual Studies (Art 10) is a prerequisite for all intermediate courses.

Drawing

Animation

Two-Dimensional Design

Three-Dimensional Design

Intermediate Ceramics

Intermediate Photography

Advanced Studio Courses

Visual Studies (Art 10) is a prerequisite for all advanced courses.

Graphics and Photography

Studio Photography

Painting

Filmmaking

Advanced Ceramics

Printmaking

Advanced Photography

Sculpture

Kinetics

Architecture

Contemporary Communications

Calligraphy: The Art of Lettering by Hand

Advanced Placement in Studio Art

History of Art: Painting and Sculpture

History of Art: Architecture

MUSIC

Applied

Beginning Instruments

Recorder Ensemble

Brass Ensemble

Woodwind Ensemble

String Ensemble

Fidelio Society

Band

Chorus

Chamber Orchestra

Private Instrumental and Vocal Lessons

The Nature of Music

Developing Musical Skills

History and Appreciation

Independent Study in the History and Literature of Music

Jazz

Popular Music in America

Theory

Orchestration and Conducting

Theory of Music I

Theory of Music II

Theory of Music III

Electronic Music

Advanced Techniques in Electronic Music

THEATRE AND DANCE

Theatre

Introduction to Theatre

Introduction to Acting

Public Speaking

Acting Workshop (Intermediate)

Advanced Acting and Directing Workshop

Stagecraft

Play Production

Shakespearean Workshop

Playwriting

Dance

Introduction to Dance

CLASSICS

Latin and Greek — still? Yes, as futuristic nightmares and present turmoils are reawakening a search for order, perspective and ideals in the human experience, names like Plato, Vergil, the Parthenon and the *pax Romana* not only symbolize great milestones in that search but also suggest the habits of mind that produce enduring greatness — the same habits of mind that show up so clearly in a sentence, paragraph or entire work of Latin or Greek literature.

The chief aim of the Classics Department is to help students rediscover this sense of order and ideals, in the hope that they may apply it, in turn, to the challenges they face today. Many recognize this by choosing Latin or Greek as the foreign language in which to fulfill the diploma requirement. Others elect one or both as second or even third languages. Still others opt for elective survey courses in various aspects of Classical civilization, as listed below, or, by special arrangement, for independent projects in reading or research.

CLASSICS

Greek

First Year: basics of language and culture

Accelerated First Year: two years in one
Introduction to Greek Language and Culture
(one term)

Second Year: Xenophon, Plato, New Testament

Third Year: Homer, Euripides

Fourth Year: Sophocles, lyric poets, Thucydides

Latin

First Year: basics of language and culture

Accelerated First Year: two years in one
Introduction to Latin Language and Culture
(one term)

Second Year: Caesar, Livy, Plautus

Third Year: Cicero, Sallust, Vergil

Fourth Year: Vergil's *Aeneid*

Fifth Year: Horace, Catullus, Livy, Tacitus

Greek Civilization

Roman Civilization

Epic Poetry

Etymology

Ancient History

Classical Mythology

Survey of Greek Literature

Survey of Roman Literature

ENGLISH

Convinced that level of achievement is more important than the number of years a subject is studied, the English Department has established modest but firm diploma requirements. A student must prove himself competent in writing and reading through the English Competence course and, by taking the Literature Sequence, acquire a sense of the depth and breadth of his literary heritage.

Once the student has successfully completed that Literature Sequence, which normally takes a year and offers several options, opportunities multiply. Students may enroll in any of the Literature Sequence courses that they have not yet taken; they may study any of the more than twenty advanced or specialized courses offered by the department; Seniors may qualify for an independent project supervised by the teacher of their choice.

The department also serves the needs of less advanced students. Tutorials are offered for train-



ing in the fundamentals of language.

The walls that used to separate academic departments are crumbling. A number of the courses in Theatre are taught by members of the English Department. Most of the interdisciplinary courses are related to English studies. A course in English etymology is taught by the Classics Department. Several of the foreign language departments offer courses about their literature in English translation, but the fundamental requirement does not change. Every student who graduates from Andover has either passed the Competence course in the basic skills of writing and reading or English 300.

ENGLISH

Introductory Courses

Language Skills

English 300 (for Seniors and Postgraduates)

Required Sequence Courses

English Competence (three terms)

Lit B, The Comic View, The

Tragic View, The Mythic View
(two terms)

Lit C, Shakespeare (one term)

Elective Courses

(Only courses with sufficient enrollment will be given.)

Efficient Reading

Irish Studies

Great Writers Before 1850

Introduction to Writing

Hemingway: The Man and His Work

Black Literature

James Joyce

Man and God

Forms of Literary Imagination

Modern Playwrights

Shakespeare: The Man, The

Times, The Theatre, The Plays

Satire and Comedy

Novel and Drama Seminar

Creative Writing

American Writers of the

Twentieth Century

Milton and Spenser

Chaucer and His Age

Wit and Poetry in the

Seventeenth Century

Writing Short Fiction

Images of Women



Graceful Bulfinch Hall (1819) has been in Academy use for more than 150 years as a recitation hall, gymnasium, and dining hall and now houses Andover's English classes. Dr. Oliver Wendell Holmes, Class of 1825, immortalized "the classic hall" in his poem, "The School-boy," written over 100 years ago for the Academy's Centennial Celebration.

HISTORY AND THE SOCIAL SCIENCES

The courses in History and the Social Sciences cover a broad spectrum of human experience: from the Vietnam War to ancient Athens, from the modern American Presidency to primitive cultures, from the American family to Chinese society. They range in teaching techniques from drill in close reading, note-taking and testing to individual projects, written or oral, conceived by students. All are based on the conviction that a citizenry that is informed about man's experience, both past and present, is essential to a democracy such as ours. It is the hope that once interest in the story of man has been kindled, it will be pursued for the rest of an individual's life.

No course in the department relies on a single textbook. Students work with paperbacks, books on reserve in the library, mimeographed handouts, movies, and slides. In all courses emphasis is placed not only on the subject matter studied but also on the acquisition of basic historical skills that should serve the student well throughout the remainder of his educational career.

The courses for the two lower classes focus on courses in biography — American and European. These courses emphasize study skills basic to the study of history. The department believes that the study of great men and women holds a special interest for this age group and reinforces the significance of the individual's role in history. In addition, these courses are designed to prepare the students for the required course in United States History to be taken in the Upper Middle or Senior year and for other upper-level history courses. Other courses for the lower classes include one in anthropology, and one in Colonial America.

The diploma requirement for History and the Social Sciences is successful completion of United States History plus one trimester elective in an upper level non-United States History, or in history prior to the settlement of the Americas, or in a social science course. These are introductory survey courses. There are also advanced seminars in various subjects in American Civilization for seniors who have completed the diploma requirements. Again the approach is topical; the tradi-

tional aim of training students to handle historical material with discretion and to write essays containing substantive factual support for general statements remains; the pedagogical techniques for accomplishing this are constantly under review. In United States History and in many of the trimester electives, students are required to choose their own topics for an extensive paper; they are encouraged to use the raw materials of history — newspapers, letters, diaries, interviews. Qualified students in American History may spend the spring term in Washington, working as interns in Congressional offices.

HISTORY AND THE SOCIAL SCIENCES

Social Science

The Emergence of Man
The Emergence of Society
Introduction to Economics
The Modern American Presidency
American Race Relations and Sectionalism
Urban Studies Institute
International Relations: The Present Patterns
Food and Hunger in Developing Countries

History

Early American Society
American Biography
European Biography
The United States
American History for Foreign Students
Ancient History
Social History of the Middle Ages
Modern Europe: A Survey
The Soviet Union
Modern Russia: History and Literature
Tudor England
Victorian England
International Relations: The Present Patterns
Modern Japan
Modern China
The Middle East
Africa and the World
Latin American Studies
Families in America
American Urban History
History and Mathematics
Topics in the History of Phillips Academy
and Abbot Academy



MATHEMATICS

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late twentieth century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his energies and curiosity to the organization of mathematical knowledge.

The mathematics curriculum is built around a core sequence of eight trimester courses, three of elementary algebra, two of geometry, and three of precalculus topics, completion of which will satisfy the diploma requirements. An additional trimester is usually required before entering calculus. Students whose previous course was elementary algebra will take *Geometry* unless our placement test indicates a need for one term of *Algebra Review* first. Those who enter with one year of algebra and one year of geometry will satisfy our diploma requirements by taking the first three precalculus trimesters unless the placement test shows a need for *Algebra Consolidation* first. The latter course delays the start of precalculus for one year and is

followed by the last three precalculus trimesters. There are a variety of special courses designed for new students who fall between the above criteria.

The department also offers many elective, term-contained and year-long courses, descriptions of which may be found in the *Course of Study*. Over one-third of all mathematics is taken electively, much of it in preparation for the Advanced Placement Examination. These courses include the study of limits and sequences, number theory, elementary and advanced calculus, analytic geometry, differential equations, probability statistics, computer analysis, linear algebra and vector analysis.

The Mathematics Department is located in Morse Hall, which also houses the campus computer center offering time sharing in the BASIC-PLUS language through ten public terminals. Instruction and practice in the use of the computer are given in the required course sequence. The main computer is a PDP-11/70 manufactured by the Digital Equipment Corporation. The department also has several micro-computers for student and classroom use.

The community of students who like math at



Andover is sizeable. They share their curiosity and knowledge by offering to tutor other students at the school, and by participating in inter-scholastic competition under the aegis of the Math and Computer Clubs.

MATHEMATICS

*Courses Leading to Satisfaction
of the Diploma Requirement*

Elementary Algebra	Mechanical Drawing
Algebra Review	Navigation
Geometry	Numerical Methods
Algebra Consolidation	Probability
Precalculus	Statistics
Elementary Functions	

Elective Courses

(Only courses with sufficient enrollment will be given.)

Calculus
Computer Programming; beginning, intermediate and advanced
Infinite Series and Differential Equations
Linear Algebra and Vector Calculus

MODERN FOREIGN LANGUAGES

As long ago as 200 B.C. the Latin poet Ennius used to say that because he knew three languages he had three hearts. Andover can render no finer service to today's world than to send forth its alumni with many hearts, ready and able to feel for, to understand, and to respond to the millions of people who speak languages other than English.

Acknowledging the importance of foreign languages, Andover requires for the diploma three years of an ancient or modern language. (For Greek and Latin, see Classics.) The modern foreign languages offered are Chinese, French, German, Italian, Russian and Spanish. Emphasis is on the spoken word, and the foreign language is the basis for all communication in the classroom. Small classes make possible maximum participation, with supplementary practice provided by our versatile language laboratory. There are opportunities to join accelerated classes which complete, for example, the work of four years in three.

At the 4th-, 5th- and 6th-year levels the study of literature may be supplemented by courses in the

art, history, geography and music of the foreign country. In upper-level courses students can prepare for the Advanced Placement Examination and qualify for advanced courses when they enroll in a college. Superior students may carry out independent projects, including apprentice teaching, under careful guidance.

At all levels of study progress in the foreign language is facilitated, and the resources of the classroom are expanded, through occasional use of communication media (periodicals, radio, etc.) and such activities as the staging of plays, the use of the school's radio station for broadcasts in foreign languages, festivals, language tables in the dining room, movies, clubs, visits by performing groups, and trips to language events in Boston and at nearby schools and universities. Students are urged to consider opportunities, sponsored by Andover or by other schools, to live and study abroad.

For Andover's School Year Abroad program, see page 44.

Chinese

In response to the importance of China and its language, and the need for some school to provide leadership in instruction at the secondary-school level, Andover is developing an intensive course in Chinese language (Mandarin) as a senior elective.

French

Before the outbreak of the French Revolution, French was considered the universal language of the West. It was the language of diplomacy, was already flourishing as a literary medium and, because of its clarity and precision, reflected both French culture and philosophy, influencing the development of democratic institutions in the United States as well as in other countries. The study of French rewards the student with the ability to communicate with French-speaking peoples and to appreciate the importance of order in expression, broadening his views through a growing familiarity with the rich and lively literature and civilization that the language represents.

German

German is central Europe's principal language, and knowledge of it opens up an understanding of European culture and affairs. Students may learn German to read the works of Goethe, Schiller, Lessing, Kafka, Hesse, Brecht and Grass in their original form, or to follow the arguments of Hegel and Nietzsche, or perhaps to understand more intimately the background of modern socialism and democracy in the world. Many of the most important developments in modern physics, electronics, chemistry and engineering were originally published in German, and American businesses are realizing increasingly the importance of personnel able to speak German.



Italian

The growing popularity of Italian in American schools and colleges reflects a growing awareness of the charm of the Italian language and of the rich cultural heritage which it serves. Andover's intensive course for Seniors attracts students with rich experiences in other languages, is conducted in Italian, and has the scope and pace of a course for college freshmen.

Russian

Approximately forty percent of Russian secondary school students are learning English. A fraction of one percent of American secondary school students study Russian. For cooperation, understanding, and influence, our doctors, diplomats, scientists, and businessmen should be able to communicate with Soviet counterparts in Russian. Since secondary school is the best place to begin,

Andover has established a rich program for our beginning as well as our advanced students.

Spanish

The Spanish Department is anxious to help students discover the varied cultural heritage of the Spanish-speaking world through intensive study of the language, both spoken and written.

It seems particularly important to learn a language spoken everyday by millions of Americans across the U.S. In addition, Hispanic literature, from Cervantes to Borges, has played a vital role in world literature, as attested by the frequency with which Hispanic writers have been awarded the Nobel Prize for Literature.

Students who enter the professions will find Spanish an indispensable tool. But whatever they do, Spanish will be the key to a richer, more rewarding life.

MODERN FOREIGN LANGUAGES

Chinese and Italian only offer an intensive introductory course for seniors. All other languages offer introductory and intermediate courses, with opportunities for acceleration at those levels. Students are then eligible for the following courses:

- French*
Language and Review and Contemporary French Life
Selected Readings
Village Français
French Civilization
Conversation and Phonetics
Written Expression
Literature and Film: French Theatre
French Literature
French History
French Civilization Outside of Europe
Québec et les Québécois
Stylistics
Advanced Placement
Contemporary Literature
- German*
Literature, Composition and Conversation
Language and Literature for Advanced Placement
Special Topics

- Russian*
Literature, Composition and Conversation
Advanced Literature, Composition and Conversation
Russian Press
Literature
Special Topics
Russian History and Literature
- Spanish*
Second and Third Year, Advanced, with winter term in Mexico
Spanish Language Review
Aspectos de la Cultura y Civilización del Mundo Hispánico
Introduction to Literature, with Grammar Review
Literature and Culture, with Grammar Review
Literature for Advanced Placement
Advanced Studies in Literature
Special Topics: Literature, Sociology, Culture
Latin American Studies

PHILOSOPHY AND RELIGIOUS STUDIES

The department seeks to initiate students into three distinctive human quests: the search for meaning, the search for justice and the search for the foundations of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered on a variety of topics, at a variety of levels, and involve four prepared class periods.

PHILOSOPHY AND RELIGIOUS STUDIES

Introduction to Religion
Non-Western Religions
Biblical World-view
Portraits of Jesus
Man's Search for Meaning
Introduction to Ethics
Bioethics
Law and Morality
Non-Violence
Responses to the Holocaust
In Search of Justice
Proof and Persuasion
Great Philosophers

SCIENCE

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers Andover students an introductory term-contained course in archaeology. The course deals with the prehistoric development of civilization and with archaeological theory and method. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas.

Biology

Andover provides ample opportunity to develop interest in the biological sciences. In addition to two year-long courses in introductory biology the department offers four courses on the advanced placement level and three elementary courses which are particularly well suited to serve younger students. The introductory courses give students a general background and an understanding of some of the current trends in biology. Field trips, laboratory work, independent projects, lectures, slides, films, and video tapes are all part of the courses. Most of the laboratory work performed during the Spring term is devoted to independent projects.

The term-contained advanced courses prepare students for the Advanced Placement Examination. These courses review some of the material presented in the introductory courses as well as introduce new concepts and techniques. The advanced laboratory work gives students experience with the techniques of chromatography, electrophoreses, spectrophotometry, centrifugation, statistical analysis and dissection. Computer simulations are also used either on the Academy's PDP 11/70 or on the Apple II microcomputers.

Bird watching trips are sponsored occasionally throughout the year by the Natural History Club for interested students who may or may not be enrolled in a biology course. A small zoo, consisting of rats, mice, gerbils, and various reptiles is maintained in Evans Hall. Its population varies with student interest, the reproductive rate of the animals and the dietary needs of the resident boa.



In the basement of Evans Hall there is a superb bird collection on loan from Harvard University and an extensive shell collection is exhibited in various parts of the building.

The Evans Hall greenhouse is a refreshing place to visit during the long winter months. Students grow plants there or start potted plants for their own rooms. An environmental growth chamber is available for those interested in experimenting with photoperiodism.

Chemistry

The Chemistry Department offers full-year introductory courses at various levels which prepare students for more advanced work in chemistry.

Many students have undertaken laboratory projects. For example, one student recently investigated the "Miller experiment," the synthesis of amino acids by electric discharge through methane, water vapor and ammonia. Another examined the colors of optically active coordination compounds of cobalt. One student spent a term synthesizing organic compounds and examining their infrared spectra. Others have studied organic qualitative

analysis as an introduction to the chemistry of organic functional groups.

Students usually suggest their own experiments, but they can also adopt and change existing projects in a creative way. A student might design computer programs for chemistry problems, study the use of microchemistry to diminish school laboratory pollution, or explore molecular structures with infrared spectroscopy.

The department has the equipment for the usual experiments in elementary synthesis and analysis, including three Mettler electronic, analytical balances. There are instruments which enlarge the scope of feasible projects — a pH meter, several vacuum tube voltmeters, a Kontes Universal Electrode Kit, a Kern polarimeter, a Bausch and Lomb Spectronic 20 colorimeter and a Perkin-Elmer 700 infrared spectrophotometer. Convenient access to computer facilities is provided by a teletype terminal located in the Roscoe E.E. Dake Computer Room in Evans Hall.

Physics and Astrophysics

The Physics Department offers five introductory courses at various levels of difficulty in order to meet the needs of Andover students. Some representative topics are mechanics, waves, electromagnetism, light, and "modern physics." Laboratory work, classroom demonstrations and extensive problem solving enable students to develop both a qualitative and quantitative understanding of the concepts of physics. Also offered are courses including earth science, astronomy, relativity and early quantum theory, and university-level Advanced Placement physics.

The Physics Department operates the Thornton Observatory which houses a research-grade 16-inch reflector, a 6-inch Brashear refractor and six other portable telescopes. These instruments are used in astronomy courses as well as in project work; recent projects have included such areas as solar, lunar and planetary study; astrophotography; computer simulations; and orbit analysis.

Past student projects have included laser transmission of information, holograms, the construction of an electronic calculator, speed of light measurements, determinations of the electronic charge and mass, interferometer measurements,

and finding the gravitational constant. Formal and informal contact with the faculty encourages students to examine the interaction of physics and the environment, including man, thus hopefully promoting better understanding of the processes of scientific investigation.

Psychology

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strategies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained.

ARCHAEOLOGY

Archaeology

SCIENCE

Introductory Physical Science

Introduction to Biological
Science

Earth Science

Astronomy — the Solar System

Introduction to Energy

Oceanography

Ecology

Introduction to Zoology

Junior Science Honors

Energy and the Future

Biology

Introductory Biology

Anatomy and Physiology

Chemistry

Elementary Introductory Chemistry

Introductory Chemistry

Research in Chemistry

Elementary Organic Chemistry

Stereochemistry

Advanced Placement Chemistry

Honors Introductory Chemistry
— Advanced Placement

Physics

Introductory Physics

College Physics

Advanced Physics

Electronics

Relativity and Quantum
Mechanics

Special Science Courses

Animal Behavior

Observational Astronomy

Astronomy — The Universe
Beyond the Solar System

Geology

PSYCHOLOGY

Human Relations

Human Sexuality



Dr. Charles Abbot, Class of 1891, a solar energy pioneer and head of the Smithsonian Institution for many years, predicted in the early 1940's that solar energy would become the primary source of power when oil and coal were depleted. In 1972 he received his last patent, for a device to convert solar energy into electricity, shortly before his 100th birthday.

OTHER COURSES

INTERDISCIPLINARY

Study Skills

Literature of the Quest

Russian Literature in English

Soviet Literature in English

Greek Literature in Translation

Roman Literature in Trans-
lation

Typing (non-credit)

Etymology

PHYSICAL EDUCATION

All Juniors and new Lower

Middlers are required to elect one trimester of P.E. 10 in addition to their regular athletic commitment.

Physical Education





Complementary Programs

Andover's complementary programs combine a number of innovative ideas designed to promote better coordination between public and private education nationally. The concept behind these programs is that of multiple schools. While one school may be accepted as the "home-base" diploma-granting institution, several other institutions may be utilized as complements to this school. Thus far, the multiple schools idea has taken form in several program models which are open to Phillips Academy students as well as students from other schools.

The Andover Summer Session

The Andover Summer Session is a short intensive academic program in which both innovative and traditional courses are taught in only six weeks. Courses in all subjects and at all levels demand hard work — harder work than most students have ever before experienced. Besides English, modern languages, mathematics, history, and the sciences, the curriculum offers such opportunities as Play Production Workshop, Social Psychology, Great Philosophers, Law and Morality, and Film Workshop, Modern Astronomy, Archaeology and Anthropology, Oceanography and Marine Biology, and Modern Economics.

Other features of the Summer Session are special courses in writing, including the nationally known "Competence in Reading and Writing" (developed at Andover); an expanded ESL Program (English as a Second Language) for foreign students who wish to achieve English fluency; and a Chamber Music Program which provides a unique opportunity for able music students in all combinations of piano, strings, winds, and voice, including individual instruction, small ensemble work, or-

chestra, and chorus; and an intensive Studio Art program for serious students of the visual arts who wish to develop a portfolio in preparation for the Advanced Placement Examination in Studio Art.

The Summer Session makes use of all the school's facilities and is open to able boys and girls from all parts of the country and abroad. Applicants must be graduates of the 9th, 10th, 11th or 12th grades. A catalog can be obtained by writing:

James L. Bunnell, *Director*
The Andover Summer Session
Phillips Academy
Andover, MA 01810
Tel. 617/473-3400, ext. 170

(MS)²: Math and Science for Minority Students

The (MS)² - Math and Science for Minority Students - Program offers Black and Hispanic Students three consecutive tuition-free summers of intensive study of mathematics and science. Ninth grade boys and girls are selected on the basis of their superior ability and strong interest in mathematics and science and financial need. The goal of the (MS)² Program is to prepare minority students to compete successfully for admission to selective colleges and for careers in science, engineering and medicine. Further information can be obtained by writing:

Elwin Sykes, *Director*
(MS)² Program
Phillips Academy
Andover, MA 01810



The Short Term Institutes

Andover has had a series of Short Term Institutes which are intensive, multi-week courses of study in a single subject, designed to offer high school students a unique residential learning experience. First taught in the fall of 1974, the Institutes offer a program in Art during winter term and special summer Institutes within the context of the Summer Session. These Institutes are designed to provide intensive study in a particular field at Andover and to complement a student's home school program, not to compete with it.

School Year Abroad

School Year Abroad offers to qualified Upper Middlers and Seniors a full academic year of living and studying in France or Spain. Originated by Andover, SYA is now jointly sponsored by Andover, Exeter and St. Paul's School. The program gives American students the advantages of living in a foreign culture without sacrificing progress at their home schools or strong preparation for college. Students live with host families, participate in the activities of local athletic and social clubs, and pursue a course of study (both in English and Spanish or French) under the supervision of sponsoring school teachers. SYA offers 19 days of group travel, all college boards, and provides full academic credit, permitting students to graduate from Phillips Academy with their own class. School Year Abroad is financially independent of its sponsoring schools. Financial aid is available. A catalog can be obtained by writing:

Harrison F. McCann, *Director*
School Year Abroad
Phillips Academy
Andover, MA 01810

Other Off-Campus Programs

Andover offers several complementary residential programs. The Washington Intern Program, sponsored by Andover and Phillips Exeter Academy, allows a group of Upper Middlers and Seniors to spend the spring term in Washington working in the offices of U.S. Senators and Congressmen. Phillips Academy tuition, fees and financial aid do not cover the cost of this program.



In addition to school-sponsored programs, many Seniors arrange off-campus projects related to their special interests. Some have worked as interns with officials in local government and members of the Massachusetts legislature, while others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative and careful planning of a course of study that will meet diploma requirements and free a block of time during the term.



Athletics



Archie Bush, Class of 1866, returned from the Civil War to complete his studies and organized a baseball team for Andover's first interscholastic sports competition. When Archie and his friends cut a geometry class to attend a baseball game, Principal Samuel Harvey Taylor, who brooked no nonsense, kicked them out of school. The Trustees rescinded this action years later and granted them all diplomas. Too late for Archie, who had died on his honeymoon trip to Europe.

In sports, as in studies, students are expected to meet basic requirements and are given wide choice in broadening and deepening their skills, interests and dedication in athletics.

A basic evaluation test is given to all new girls and boys to insure that each student has the physical skills necessary for further participation in the athletic program. Special courses are required of those students whose test results indicate a need for attention in the area of physical aptitude. Similarly, non-swimmers are given instruction toward meeting reasonable standards of proficiency. In addition, Juniors and new Lower Middlers take physical education five hours a week for one term, as well as regular athletics.

The regular afternoon athletic program includes a wide variety of offerings in varsity and junior varsity competitive interscholastic sports, in intramural cluster-organized athletics and in instructional and recreational physical activities. New students are strongly encouraged to participate for at least one term at Andover in a team sport or a dance performance program. Wherever numbers permit, separate interscholastic competitive team programs are created for Junior boys.

Upperclassmen have the opportunity to substitute an activity or project for one term of athletics a year. Each spring the department attempts to offer an evening Senior Life Saving course and a Water Safety Instructors' course, in addition to required athletics, for those swimmers who wish official accreditation.

The school maintains several athletic facilities which include 12 playing fields and 25 tennis courts; the Borden, Memorial and Abbot Gymnasium Complex with swimming and diving pools, basketball and squash courts, weight training room and other conventional gym spaces; the

newly renovated Case Memorial Cage with its indoor track; the Sumner Smith Hockey Rink; the crew boathouse on the Merrimack River; the ski trails and jump at Holt Hill; and finally the Search and Rescue Room in Evans Hall which provides the base of operations for Andover's popular outdoor program.

Phillips Academy is committed to a required athletic program that provides a variety of sports and activities to its students. The Academy discourages overspecialization in sports at this age level; the athletic program is a complement to, not a substitute for, the academic curriculum. The Athletic Department oversees the program and its facilities with the support and advice of the Faculty Athletic Committee and the Student Athletic Advisory Board.

Health Care

The Isham Infirmary of Phillips Academy is fully licensed as a hospital by the Commonwealth of Massachusetts. The Medical Director, Dr. Claire

D. Wilson is a pediatrician specializing in adolescent medicine, is on the staff of Children's Hospital Medical Center, Boston, and is a Junior Fellow of the American Academy of Pediatrics. The Infirmary has an x-ray department with a full-time technician. Basic laboratory services are also available at the Infirmary. Qualified physiotherapists are available either in the Infirmary or Trainers' Room. Graduate nurses are on duty twenty-four hours daily, and additional graduate nurses manage the Outpatient Services from 7:30 a.m. to 8:00 p.m. Isham Infirmary is staffed and equipped to care for most problems, and nearby general hospitals are available for major surgery or serious emergencies.

In addition to the daily outpatient clinic held by the Medical Director, regular clinics are conducted at Isham Infirmary in dermatology, orthopedics, and dentistry. Gynecologic counseling is available by appointment. Staff consultants are available in most specialty fields of practice, and full-time clinical psychologists can provide professional counseling.

FALL TERM

Boys

Ballet
*Ceramics
*Community Service
Crew
Cross-Country
Cycling
Fitness
Football
Karate
Modern Dance
*Music
Paddle Tennis
*Photo Field Trips
Search & Rescue
Soccer
Squash
Swimming
Tai Chi
Tennis
Yoga

Girls

Ballet
*Ceramics
*Community Service
Crew
Cross Country
Cycling

Field Hockey

Fitness
Karate
Modern Dance
*Music
Paddle Tennis
*Photo Field Trips
Search & Rescue
Soccer
Squash
Swimming
Tai Chi
Tennis
Volleyball
Yoga

WINTER TERM

Boys

Ballet
Basketball
*Ceramics
*Community Service
*Drama
Fitness
Gymnastics
Hockey
Modern Dance
*Music
Paddle Tennis
Search & Rescue

Skiing:

Competitive (Alpine and Nordic)
Recreational (Cross Country)
Squash
*Stage Crew
Swimming
Track
Wrestling
Yoga

Girls

Ballet
Basketball
*Ceramics
*Community Service
*Drama
Fitness
Gymnastics
Hockey
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Skiing:
Competitive (Alpine and Nordic)
Recreational (Cross Country)

Squash

*Stage Crew
Swimming
Track (non-competitive)
Yoga

SPRING TERM

Boys

Ballet
Baseball
*Ceramics
*Community Service
Crew
Cycling
Fitness
Golf
Karate
Lacrosse
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Softball
Squash
*Stage Crew
Swimming
Tai Chi
Team Cycling
Tennis
Track

Yoga

Girls

Ballet
*Ceramics
*Community Service
Crew
Cycling
Fitness
Golf
Karate
Lacrosse
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Softball
Squash
*Stage Crew
Swimming
Tai Chi
Team Cycling
Tennis
Track
Yoga

*Activities in place of sports are available one term a year to upperclassmen



In the 1840's the widow of Principal Osgood Johnson devoted herself to the care of sick Seminary students at Samaritan House, built and named for that purpose, now a student dormitory. In spite of this, rows of gravestones mark the toll of epidemics. An Academy graduate of 1890 reports that no such care as Widow Johnson's was available to the Academy students of the 1890's: "There was no infirmary. If you were ill, it was nobody's business but your roommate's, who brought you meals from Marland's unappetizing fare."

CALENDAR 1982-83

Fall Term

Sept. 8, Wed.	Varsity Teams return, as invited
Sept. 8, Wed.	Faculty return by evening
Sept. 12, Sun.	New students arrive and register
Sept. 14, Tues.	Old students return and register
Sept. 16, Thur.	Classes begin
Oct. 22, Fri.	Mid-term academic review
Oct. 29-31, Fri.-Sun.	Parents' Weekend (all parents)
Nov. 1, Mon.	No classes
Nov. 24, Wed.	Thanksgiving vacation begins, 12:50 p.m.
Nov. 29, Mon.	Thanksgiving vacation ends, 8 p.m.
Dec. 6, Mon.	Classes end, 12:50 p.m. (Wednesday schedule)
Dec. 11, Sat.	Christmas vacation begins, 12 noon

Winter Term

Jan. 3, Mon.	Christmas vacation ends, 8 p.m.
Feb. 4, Fri.	Mid-term academic review
Feb. 7, Mon.	Mid-winter holiday (no classes)
March 8, Tues.	Classes end, 12:50 p.m. (Wednesday schedule)
March 12, Sat.	Spring vacation begins, 12 noon

Spring Term

March 29, Tues.	Spring vacation ends, 8 p.m.
April 29, Fri.	Mid-term academic review
May 30, Mon.	Classes end, 12:50 p.m. (Wednesday schedule)
June 3, Fri.	Spring trimester examinations end, 6 p.m.
June 5, Sun.	Commencement
June 9, Thurs.	Spring trimester academic review meeting, 9 a.m.
June 10-12, Fri.-Sun.	Alumni Reunions
June 30, Thurs.	Summer Session begins
Aug. 11, Thurs.	Summer Session ends

Admissions

APPLICATION PROCEDURE

Priority will be given to those candidates who complete the application procedure, including the interview, by February 1. A decision from the Admissions Committee will be mailed on March 10. The possibility of admission is considerably lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. It is also possible that 12th Grade and Postgraduate candidates will not be notified until late spring. A deposit of \$200 is required to reserve a place at the time admission is offered to an applicant.



L. to r., Front: Jean C. McKee, Admissions Coordinator; Grace H. Taylor, Administrative Assistant; Rebecca Carr, Admissions Officer; Rear: Thomas G. Speers, Admissions Officer; Meredith Price, Associate Dean of Admissions; Joshua L. Miner, Dean of Admissions; Robert P. Hulburd, Admissions Officer. Not pictured: Frank F. DiClemente, Liaison with Alumni Representatives; Jan Burton, Admissions Officer

4 STEPS TO BE COMPLETED FOR APPLICATION

1 Submit the Preliminary Application Card and the non-refundable \$20 fee as soon as possible. (Checks are payable to the Trustees of Phillips Academy.) **Application will not be considered unless the Preliminary Application Card and Fee are received.**

2 Complete the Personal Interview Requirement. Candidates must complete the required interview by February 1. Candidates are urged to schedule interviews in either the spring, summer, or early fall of the year before they intend to matriculate. It is in everyone's best interests for the interview to take place as early as practicable. A visit to the Academy is desirable as it gives candidates a chance to have questions answered and to see the school. Please allow two hours for the tour and interview and be sure to dress with the weather in mind. **Candidates who cannot visit the Academy are themselves responsible for arranging an interview with an Alumni Representative.** (See page 54.)

3 Return the Final Application Forms. Final application forms, mailed in mid-November to candidates who have filed preliminary applications, should be returned no later than 10 days after the end of the fall marking period. Priority consideration is given to applications completed by the advertised deadline of February 1. ("Late applicants" should return forms immediately.) Teacher recommendations should be from *current* teachers.

4 Take the Secondary School Admissions Test. (12th Grade or Postgraduate candidates are not required to take the SSAT. See next page.)

Secondary School Admissions Test

The Bulletin of Information for Candidates, published by the Educational Testing Service, Princeton, NJ 08540, will be sent by Andover to all 1982-83 candidates who have filed a Preliminary Application. This Bulletin describes the Secondary School Admissions Test, which will be given on the following dates:

December 11, 1982	March 5, 1983
January 15, 1983*	April 23, 1983*
June 18, 1983	

*International administration

Candidates are strongly urged to take the SSAT administered in December, 1982. (The December tests will not be given in foreign countries.) Otherwise, the candidate should take the January, 1983 administration.

Early Decision

Andover does not participate in any early decision plan for admissions.

Twelfth Grade or Postgraduate Candidates

Instead of the Secondary School Admissions Test, Senior and Postgraduate candidates must take the Preliminary Scholastic Aptitude Test or the College Board Scholastic Aptitude Tests (C.E.E.B., Box 592, Princeton, NJ 08540).

Postgraduates are full-fledged members of the Senior Class and are eligible for all school activities. Because of their academic credits, they frequently have maximum flexibility in course selection.

If you have a question:

About Andover's admissions or applications procedures, call or write the Admissions Office

About an appointment: call or write the Appointment Secretary, Admissions Office

To request a catalog: call or write the Admissions Office

Admissions Office

Phillips Academy

Andover, Massachusetts 01810

Telephone: (617) 475-3400 x 196

Joshua L. Miner, Dean of Admissions

Office hours: Monday through Friday, 8:30 a.m. to 4:30 p.m.

Saturday, 8:30 a.m. to 12:00 noon

"Youth from Every Quarter"

The School's *Constitution*, written in 1778, states that Andover "shall be ever equally open to Youth of requisite qualifications from every quarter."

With this principle in mind, the basic requirement for admission to Andover today continues to be evidence of sound character and strong academic achievement. The school is especially interested in candidates who demonstrate maturity and concern for others in addition to high performance in particular studies or activities. Valuing diversity in its student body, the school seeks to bring together a community from all parts of the country and from many nations.

The Admissions Committee selects from over 3,500 candidates the 460 most promising and deserving young people. The school's endowment covers approximately one-third of the cost of an Andover education. Therefore, in fact, every student receives financial aid. In addition, thanks to the generosity of a large number of alumni and friends, further financial assistance is available (see Financial Aid Section, page 53).

Schools Costs and Financial Aid

Tuition and Fees, 1982-83

The annual charge for 1982-83 is \$8200 for boarding students and \$6250 for day students.

	<i>Boarding</i>	<i>Day</i>
Tuition	\$5100	\$5100
Room	1520	—
Meals	1200	800
Athletics and Activities	230	230
Health	150	150
Total	\$8200	\$6250

Day Students

Day students must live in Andover, North Andover, North Reading, Methuen or Lawrence.

Phillips Academy admits students of any sex, race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of sex, race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

To reserve a student's place for a given school year, a deposit in the amount of \$200 must be received by May 1, in the case of a returning student, or by the acceptance deadline in the case of a new admission. This payment applies only as a credit to the school year's final scheduled billing. It is non-refundable under any circumstances.

One-half of the above tuition and fees is payable on August 1, and one-half, less the deposit, on December 1.

An alternative is the use of the Insured Tuition Payment Plan, arranged with a private agency. Information about this alternative and an application form are sent to the parents before the first bill is due.

No rebate will be made against the amount of the installment due on August 1 for any student who for any reason is dismissed or withdrawn after registration in the fall. No rebate will be made against the installment due on December 1 for any student who is dismissed or withdrawn after returning to school at the beginning of the winter trimester.

These charges cover instruction, board, room (including basic furniture), physical training and most athletic privileges, use of laboratory equipment and material, admission to all authorized athletic contests and most authorized entertainments at George Washington Hall or elsewhere on campus, including the Saturday evening motion pictures.

The school charges do not include tutoring, language training, special instruction in music or certain athletics, materials fees for art courses, medical expenses, laundry, textbooks, dues to school organizations or breakage and damage to school property. The school charges do not include cost of participation in the Washington Intern Program, School Year Abroad, or other off-campus programs. The school provides uniforms and most athletic equipment. Students are required to bring their own footwear and urged to bring along whatever other personal athletic equipment they already possess. Bills for items not included in the school charges may be rendered at any time during the school year.

All charges must be paid by their due date in order to assure a student's place at the Academy. Students with past-due bills may be terminated at

any time. The diploma of the Academy will not be awarded to Seniors whose school accounts are not paid in full by June 1.

Other Expenses

As a rough guide to parents in budgeting for the total expected expenses of each academic year, the following low-average approximations of extras are given:

Travel	According to home location
Athletic Equipment	\$150
Laundry and Cleaning	250
Medical Insurance (optional)	35
Books and Supplies	400
Dues, publications and charitable contributions	50
Breakage Deposit (refundable)	100
Miscellaneous, including spending money	250

Financial Aid: The Andover Plan

Phillips Academy will do its best to see that no admitted student is denied the chance to attend due to inability to finance his or her education here. To that end, the Academy provides over \$2,000,000 in direct financial aid each year, in addition to endowment support for all students. Under the comprehensive Andover Plan, families with incomes of up to \$60,000 a year may qualify for some form of direct assistance from the Academy.

The Andover Plan consists of three parts:

- I. General support of all students' educational cost, principally through income from the school's \$82,000,000 endowment, a product of the generosity of past Andover graduates, parents and friends. This income pays more



- than 34 percent of the real costs of the educational services Andover actually offers.
- II. Scholarships supplemented, as necessary, by a Student Loan Plan, for qualifying students, ranging from several hundred dollars to total costs, as needs warrant and funds permit, based upon information provided through the School Scholarship Service in Princeton, NJ. Repayment of low interest Student Loans begins four years after graduation, with an additional four years allowed for completion. Each family indicating a need for assistance on the Preliminary Application Form will be mailed a Parents' Financial Statement which is processed by the School Scholarship Service in Princeton, NJ. *All awards are reviewed annually and a Parents' Financial Statement must be filed each year if continued aid is needed.* In addition, parents are asked to submit to the Academy a current IRS form 1040 with appropriate schedules.
- III. A new Parent Loan Plan available, at a modest rate of interest, to families in the \$20,000 to \$60,000 income range, as their needs require, with preference given to students entering 9th and 10th grades. Repayment of these loans begins immediately, but repayment of the principal is deferred during the students' college years and then continues for two additional years.

The combination of general endowment support with the programs of Scholarships for low income students, Scholarships and Student Loans for a broad spectrum of need, and Parent Loans for middle and upper income families gives Andover the flexibility to provide maximum assistance to families seeking an Andover education.

Requests for aid filed after the January 15 deadline may not be processed in time to be included in the initial allotment of Scholarship funds. Requests filed after January 15 must wait subsequent availability of scholarship monies.

Alumni Representatives

While it is advisable from the student's point of view to visit the school, frequently distance renders a visit impractical. When this is the case, the candidate should write or telephone for an interview with the most conveniently located Alumni Representative. (Please see list on page 55.) When you arrange for an interview with an Alumni Representative, please notify the Andover Admissions Office of the date of the interview and the name of the interviewer. This procedure will help us keep your records up to date. A candidate unable to arrange for an Alumni Representative Interview should communicate with the Admissions Office for assistance.

Admissions Travel Schedule

During the coming school year the Admissions Office representatives plan to be in the following cities:

October 4-6	Miami/Montreal
October 17-22	San Francisco/Oakland/Los Angeles/Denver
October 24-29	St. Louis/Chicago/Detroit/Cleveland
November 8-10	Brooklyn/New York City
November 15-18	Washington/North Carolina/Philadelphia/Baltimore

ALABAMA

Birmingham

Miss Jacqueline Carter '72
P.O. Box 7964 35228
A. Henry Gaede, Jr. '57
Bradley, Arant, Rose & White
1500 Brown-Marx Building 35201

Mobile

David F. Dean, M.D. '56
612 Montclair Way West 36609

ALASKA

Anchorage

John K. Brubaker '55
2110 Otter St. 99504
Howard S. Reed '45
6112 Prosperity St. 99504

Fairbanks

K. Andre McMullen '66
Star Route — Box 10088
99701

ARIZONA

Fort Huachuca

John H. Chory '76
Box 1605
Co. D USAICS 85612

Litchfield Park

George T. French '29
P.O. Box 578
609 North Litchfield Rd. 85340

Scottsdale

Mrs. William E. Dampier '47
4721 North 70th St. 85257

Tucson

John S. Greenway '42
1634 North Olsen Ave. 85719
Prof. Richard L. Morse '53
1939 E. 3rd St. 85719
Donald B. Rollings '70
3805 E. Calle Barcelone 85716

ARKANSAS

Forrest City

Henry Loeb III '39
Growers Equipment Co.
P.O. Box 748 72335

Little Rock

Mose Smith III, M.D. '48
5326 West Markham St. 72205

CALIFORNIA

Arcadia

Reginald D. Barnes, Jr. '58
557 Gloria Rd. 91006



Beverly Hills

Alan L. Fox '60
167 S. Rodeo Dr. 90212

Corona Del Mar

John E. Kidde '64
3907 Inlet Isle Dr. 92625

Costa Mesa

James B. Blackmon '57
337 Vista Baya 92627

Fresno

Geoffrey M. Brittin, M.D. '52
8269 Sanders Ct. 93727

La Jolla

Kevin O'Brien '71
Dean Witter & Co., Inc.
1020 Prospect St. 92038

Los Altos

Philip J. Kann '71
327 Lunada Ct. 94003

Los Angeles

David A. Cathcart '57
Gibson, Dunn & Crutcher
515 South Flower St. 90071
Robert J. Cathcart '64
707 Wilshire Blvd.
Suite 3200 90017
Alan Chmura '69
1015 W. 34th St., #1405 90007

George W. Davis III, M.D. '52
4616 Kenison Ave. 90043
Walter L. Farley, Jr. '28
12300 1st Helena Dr. 90049
Elizabeth Figus '42
818 N. Doheny Drive #703
90069

Trevor A. Grimm '56
Kaplanis & Grimm
551 South Oxford Ave. 90020

Jeff Hiroto

1133 N. Hicks Ave. 90063
Timothy C. McChristian '73
4155½ S. Dalton 90062
Christopher L. Rafferty '66
Union Venture Corporation
445 South Figueroa St. 90071
Thompson K. Vodrey '52
840 South Fairfax Ave. 90036

Marysville

Harold S. Edwards '28
770 Ramirez Rd. 95901

Menlo Park

Carey Orr Cook '61
1065 San Mateo Drive 94025

Miranda

Craig B. Reynolds '73
P.O. Box 495, 95553

Oakland

Mrs. Deborah Little Paris '66
326 Athol Ave. 94606 (or 25854
Freezeout Rd., Duncan Mills 95430)

Palo Alto

Henry E. Riggs '53
634 Lowell Ave. 94301
Donald A. Way '63
541 Cowper Street, Suite D 94302

Pasadena

Russell M. Decker '56
691 Holladay Rd. 91106
Graeme Henderson '52
1613 Vista Lane 91103
Judy Mustille '66
1146 Wellington Ave. 91108

Riverside

Peter C. Parsons '55
Riverside County Publishing Co.
P.O. Box 8368 92505

Ross

H. Leonard Richardson '45
1 Circle Dr. 94957

San Diego

Norman R. Allenby '51
3222 Quimby St. 92106

San Francisco

Hobart M. Birmingham, Jr. '62
Bank of America Bldg.
555 California St. -34th Floor 94104

(cont.)

Alumni Representatives

San Francisco (cont.)

Patrick A. Cathcart '64
Hancock, Rothert & Bunshoft
100 Bush St. 94104
Bradley A. Geier '75
90 Gold St. 94133
William M-S. Lee '51
580 Market St. 94104
Samuel R. Miller '66
Morrison & Foerster
One Market Place
Spear Street Tower 94105
Patrick J. O'Hern '65
3559 Jackson St., #20 94118
Thomas E. Pollock III '61
500 Sansome St.-Suite 205 94111
John M. Reynolds '65
333 Moscow St., 94112
William D. Sherman '60
Pillsbury, Madison & Sutro
225 Bush St. 94104
William W. Sterling '57
Heller, Ehrman, White & McAuliffe
30th Floor
44 Montgomery St. 94104

San Rafael

William S. Creighton '39
32 Woodoaks Dr. 94903

Santa Barbara

Jonathan E. Mudge '75
980 Canon Rd., 93110

Santa Rosa

Donald M. Reynolds '38
5053 Morocco Ave. 95405

Sebastopol

William D. Lynch '38
10592 Occidental Rd. 95472

Shingle Springs

Marshall T. Gleason '33
3067 Cambridge Rd. 95682

Torrance

Sam Suitt '57
1747 Maple Ave. #73 90503

Whittier

Carlos F. Sanchez '75
14514 Imperial Highway 90604

COLORADO

Aspen

John P. McBride '56
105 Pacific Ave. 81611

Colorado Springs

Mrs. William Boddington '41
1433 Alamo Ave. 80907

Denver

Anthony T. Accetta '61
Steele Park
50 South Steele St., Suite 420 80209
Peter Grant '49
545 Race St. 80206
Margot Kent '75
4465 Newton St. 80211
John F. Malo '40
1108 15th St.
Suite 807 80202
David C. Wilhelm '38
Wilhelm Company
1200 Cherry Creek Plaza II
650 South Cherry St., Box 22856
80222

Glenwood Springs

Rev. George P. Pierce '49
546 Hyland Park Dr. 81601

Littleton

William R. Rapson '63
33 Fairway Lane 80123

CONNECTICUT

Darien

George H. Webb, Jr. '50
7 Sherry Lane 06820

David E. Winebrenner '58
27 Briar Brae Rd. 06820

Fairfield

Kenneth D. Krier '68
75 Lalley Blvd. 06430

Greenwich

Gerard E. Jones '55
Deer Lane 06830

Roger S. Seymour
50 Porchuck Rd. 06830

Westport

Robert B. Simonton '50
25 Woody Lane 06880

DELAWARE

Wilmington

Mrs. Robert Bryant '65
2309 Saymore Rd. 19803
Mrs. Reeves W. Hart, Jr. '47
18 Briar Rd., Briarwood 19803

DISTRICT OF COLUMBIA

Washington

Douglas O. Adler '70
Bowman Conner Touhey & Thornton
2828 Pennsylvania Ave., N.W. 20007
George W. Beatty '50
3438 34th Place, N.W. 20016

Stephen B. Clarkson '55
Sullivan & Beauregard
Suite 925 North
1800 M. Street, N.W. 20036

Lawrence C. Dalley, Jr. '45
Brand, Dalley & Co.
888 17th St., N.W. 20006

Andrew P. Ireland '48
1513 Longworth Bldg. 20515
Malcolm H. Stevenson '71
1830 Ingleside Terr., N.W. 20010

FLORIDA

Gainesville

Richard M. Cohen '61
4313 N.W. 32nd St. 32605

Jacksonville

Arthur W. Milam '45
Milam & Wilbur
P.O. Box 58 32201
Robert D. Van Cleve '50
Riverside Clinic
2005 Riverside Ave. 32204

Key Biscayne

Carlos M. de la Cruz '59
300 Island Dr. 33149

Miami

Mrs. Constantinos Emmanuel '54
6971 S.W. 134th St. 33156
David J. Williams II '38
13815 S.W. 84th St. 33143

Naples

Robert W. Hattemer '49
440 Spinnaker Dr. 33940

Palm Beach Gardens

Armando Bacalao '65
10821 N. Military Trail Apt. #7
33410

Sarasota

Parker C. Banzhaf '38
3435 Sea Grape Dr. 33581
Michael T. Madison '65
The Marie Selby Botanical Gardens
800 S. Palm Ave. 33577
John D. Pitts '56
324 Bob White Way 33577

Tallahassee

Jerry L. Draper '57
2012 Cynthia Dr. 32303

Winter Haven

Richard C. Cheney '48
1826 Sixth St., S.E. 33880

GEORGIA

Atlanta

D. Hayes Clement '54
Arthur Andersen & Co.
25 Park Place, N.E. 30303
Herbert R. Elsas '28
Sutherland, Asbill & Brennan
3100 First National Bank Tower
30303
Louis J. Elsas, II, M.D. '54
Medical Genetics
P.O. Drawer AM
Emory School of Medicine 30322
Peter C. Mohr '54
1035 Angelo Ct., N.E. 30319

Columbus

William S. Cain, Jr. '40
P.O. Box 2125 31902

Savannah

William C. Rhangos, M.D. '49
Savannah Orthopedic Clinic, P.C.
5212 Paulsen St. 31405

HAWAII

Honolulu

Thomas L. Stirling '59
Spencer, Snyder & Stirling
1650 Pioneer Plaza
99 Fort St. 96813

IDAHO

Boise

Richard W. Hirst '28
1210 Happy Dr. 83704

ILLINOIS

Chicago

Warren Baker '66
Winston & Strawn, Suite 5000
One First National Plaza 60603
Joseph S. Beale '55
Hawthorn Realty Group
8 East Huron 60611
Rodney Goldstein '70
3000 N. Sheridan Rd. 60657
King W.W. Harris '61
209 E. Lake Shore Dr. 60611
Robert B. Stearns '70
Booz, Allen & Hamilton
135 S. LaSalle St. 60603

La Grange

Ronald J. Floto '61
219 S. Spring Ave. 60525

Peoria Heights

Robert T. Stevenson, Jr. '53
4849 Grand View Dr. 61614

Quincy

Mrs. Gary P. Hull '58
RR #5 62301

Springfield

Jon G. Noll '66
Mrs. Jon G. Noll '66
#5 Hackberry Lane 62704

Wilmette

W. Newton Burdick, Jr. '35
1630 Sheridan Rd., Apt. 81
60091 (Office Pandick Press, Inc.,
111 North Canal St., Chicago
60606)
Mrs. Rita Kallman '52
Wilmette Park District
1200 Wilmette Ave. 60091

Winnetka

William C. Wood '47
1103 Spruce St. 60093

INDIANA

Indianapolis

Mrs. Frank Walker '56
3637 E. 71st Street 46220

IOWA

Iowa City

Roger D. Milkman '47
RR #6, Box 204
12 Fairview Knoll 52240

Waterloo

Craig W. Nordeen '70
3917 Del Matro Rd. 50701

KANSAS

Junction City

John G. Montgomery '58
Montgomery Publications, Inc.
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10023

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10021

William D. Hart, Jr. '36
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Sven E. Hsia '59
35 East 85th St. 10028
George R. Ireland '74
401 E. 80th St. #3K 10028

Jean-Paul Joseph '68
1001 Fifth Avenue 10028
Howard Lim, Jr. '69
441 Park Ave. S. 10016

Ernest D. Obermeyer '42
1095 Park Ave. 10028
Roger L. Strong '44
660 Madison Ave., 5th fl. 10021

Mrs. Oscar L. Tang '57
120 East End Ave. 10028
Peter Williams '70
49 W. 69th St., #2A 10023

Pompey

William M. Tuck '54
Sweet Rd. 13138

Rochester

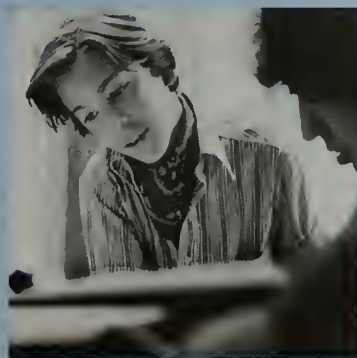
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Utica

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2800 North Carolina National Bank
Plaza 28280
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So. Burlington

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Franz-Joseph-Strasse 41
40

YUGOSLAVIA

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STATISTICAL INFORMATION for 1981-1982



In 1864 Shimeta Neesima left Japan as a stowaway on the clipper ship "Wild Rover" for America and sold his samurai sword for a Chinese New Testament. He was adopted by the shipowner, an Andover Trustee, was christened Joseph Hardy Neesima, graduated from Andover in 1867, later from Amherst and the Andover Theological Seminary, and became the first Japanese to be ordained a Congregationalist minister. Neesima returned to Japan to found The Doshisha, a great university in Kyoto dedicated to Japanese and Christian ideals. Doshisha recently celebrated its 100th birthday.

Geographical Distribution

Alabama	3
Alaska	1
Arizona	2
Arkansas	1
California	62
Colorado	18
Connecticut	64
District of Columbia	21
Florida	13
Georgia	6
Hawaii	1
Illinois	25
Indiana	5
Iowa	7
Kansas	2
Kentucky	3
Louisiana	1
Maine	16
Maryland	11
Massachusetts	472
Michigan	7
Minnesota	10
Mississippi	1
Missouri	9
Montana	1
Nebraska	4
Nevada	1
New Hampshire	21
New Jersey	38
New York	183
North Carolina	16
Ohio	24
Oklahoma	1
Oregon	2
Pennsylvania	21
Puerto Rico, U.S.V.I.	4
Rhode Island	17
South Carolina	2
Tennessee	8
Texas	15
Vermont	12
Virginia	13
Washington	2
Wisconsin	6
Total U.S.	1152

Aruba	1
Bahamas	1
Bermuda	1
Botswana	1
Canada	9
Peoples Republic of China	3
Colombia	1
France	4
Germany	3
Ghana	1
Great Britain	3
Greece	1
Hong Kong	3
Italy	2
Japan	7
Korea	2
Libya	1
Norway	1
Saudi Arabia	1
Spain	5
Switzerland	1
Thailand	2
Venezuela	3
Yugoslavia	1
Total foreign	58
SCHOOL TOTAL	1210

	<i>Girls</i>	<i>Boys</i>	<i>Total</i>
Seniors	141	250	391
Uppers	153	214	367
Loweres	120	187	307
Juniors	57	88	145
	471	739	1210
Total Boarding Students			958
Total Day Students			252
TOTAL			1210

College Matriculations for the Class of 1981

The Class of 1981 applied to 153 different colleges and matriculated at 94 colleges and universities across the country.

COLLEGE	AD-MITTED	MATRIC-ULATED	COLLEGE	AD-MITTED	MATRIC-ULATED	COLLEGE	AD-MITTED	MATRIC-ULATED
Amherst	17	12	Lesley	1	1	Univ. of Wash.	2	2
Arizona St.	1	1	Lewis & Clark	5	1	Wellesley	9	3
Babson	3	1	Marquette	1	1	Wesleyan	31	6
Barnard	15	5	MIT	5	2	William & Mary	5	5
Bates	8	1	Univ. of Mass.	13	1	Williams	9	7
Bethany	1	1	McGill	3	1	Wittenberg	2	1
Boston Col.	8	3	Univ. of Mich.	31	4	Yale	36	23
Boston Univ.	15	4	Middlebury	18	9			386
Bowdoin	4	2	Mount Holyoke	12	3			
Brandeis	5	1	Univ. of NH	12	5			
Brown	38	12	Newcomb	5	1			
Bryn Mawr	2	1	Univ. of N.C.	9	2			
Univ. of Calif.			Northwestern	35	8			
Berkeley	28	14	Notre Dame	3	2			
Los Angeles	4	2	Oberlin	15	6			
San Diego	1	1	Ohio Wesleyan	6	1			
Carnegie Mellon	7	2	Univ. of the Pacific	1	1			
Univ. of Chicago	11	4	Univ. of Penn.	45	16			
Colby	9	2	Pomona	6	3			
Colgate	10	2	Princeton	25	14			
Colo. Sch. of Mines	2	1	Queens, Canada	1	1			
Univ. of Colorado	19	3	R.P.I.	12	1			
Columbia	21	6	Univ. of Rochester	16	2			
Conn. College	13	2	Rochester Inst. Tech.	1	1			
Cornell	23	9	St. Lawrence	5	5			
Dartmouth	41	31	Univ. of Santa Clara	1	1			
Deep Springs	1	1	Sarah Lawrence	5	2			
Dickinson	2	1	Skidmore	4	1			
Duke	21	11	Smith	19	5			
Emory	6	1	Stanford	9	7			
Franklin & Marshall	3	1	Swarthmore	5	1			
Georgetown	20	5	Sweet Briar	1	1			
Gettysburg	2	1	Syracuse	6	1			
Hamilton	11	2	Univ. of Texas	2	1			
Hampshire	2	1	Univ. of Toronto	2	1			
Harvard	43	33	Tufts	23	6			
Harvey Mudd	1	1	Tulane	8	6			
Haverford	5	3	Union	7	1			
Holy Cross	8	4	US Naval Acad.	1	1			
Johns Hopkins	14	1	Vanderbilt	6	4			
Kenyon	2	1	Vassar	18	2			
Lafayette	3	1	Univ. of Vermont	22	6			
Lake Forest	3	2	Univ. of Virginia	11	2			
Lehigh	9	4	Washington Univ.	6	1			

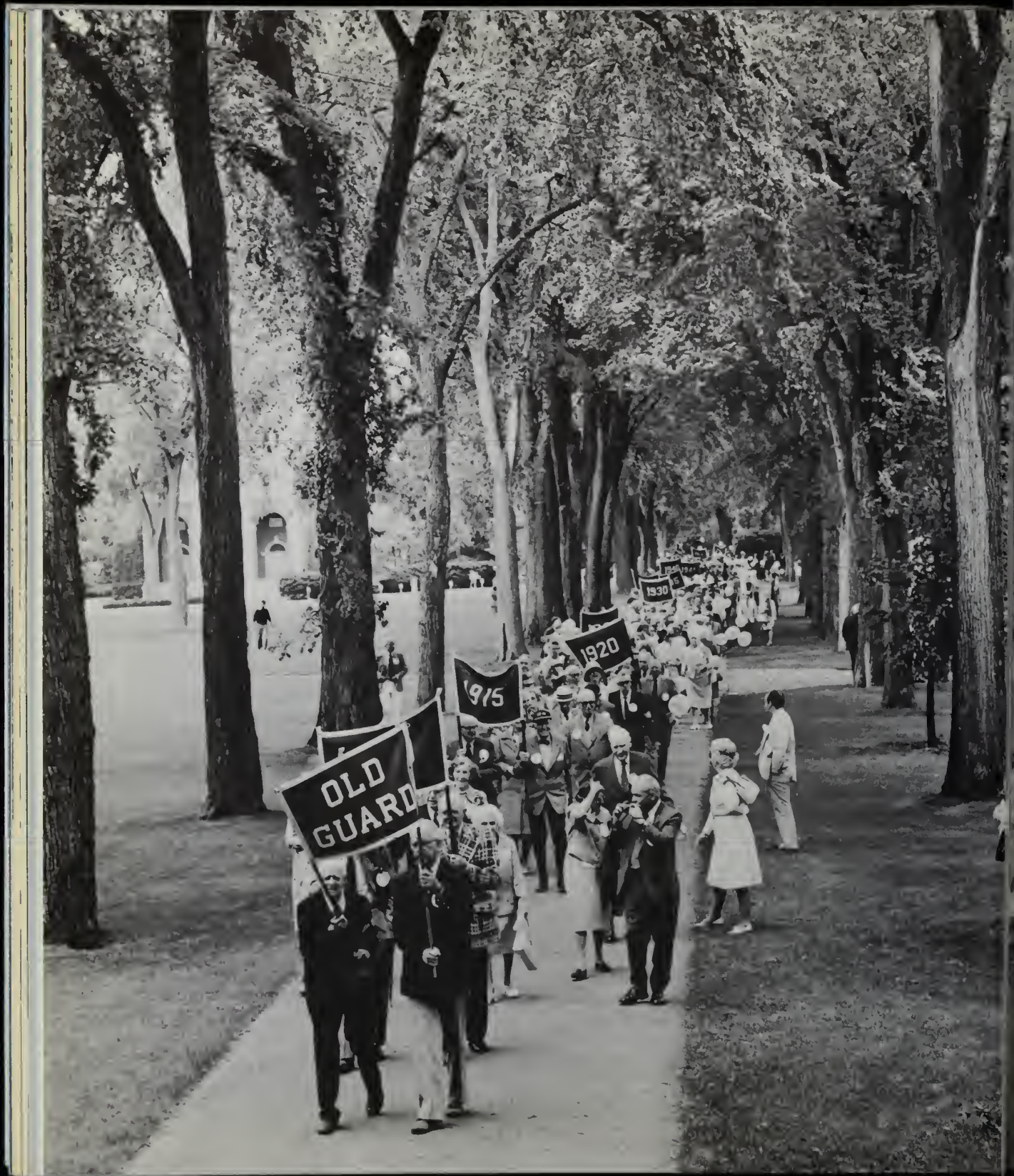
College Admissions

Admission to colleges is not based on a student's mere presence at Andover, but is based on how well the student has used this experience. All selective colleges exercise judgments relative to factors over and above academic ability in selecting a freshman class. While some of these factors relate to exceptional talents in one area or another, others are related to diversity in background and educational objectives.

The college admissions picture is entirely different and infinitely more complex now than it was in past decades. Competition for admission to selective colleges is rigorous, and Andover students are encouraged to apply across a range of choices to colleges with varying degrees of selectivity. The one constant in all of this should be a real desire to educate oneself. To this end the College Counseling Office works with the class as a whole and with each candidate to help each one draw up a list of colleges that makes sense.

Phillips Academy seniors go to college well prepared for the academic program and social experience that lies ahead.





TRUSTEES

MELVILLE CHAPIN '36

A.B., J.D.

President

elected 1974

elected President, 1981

Cambridge, Massachusetts

DONALD W. McNEMAR

B.A., M.A., Ph.D.

Clerk

elected 1981

Andover, Massachusetts

CHARLES APPLETON MEYER '35

A.B.

Treasurer

elected 1969

elected Treasurer 1976

Lake Forest, Illinois

JOHN USHER MONRO '30

A.B.

elected 1958

Birmingham, Alabama

ROBERT LIVINGSTON IRELAND III '38

A.B., LL.B.

elected 1960

New York, New York

GERARD PIEL '33

A.B., D.Sc., Litt.D., L.H.D., LL.D.

elected 1969

New York, New York

WILLIAM WADE BOESCHENSTEIN '44

S.B.

elected 1971

Perrysburg, Ohio

CAROL HARDIN KIMBALL '53

A.B.

elected 1974

New York, New York

RICHARD LEE GELB '41

A.B., M.B.A.

elected 1976

New York, New York

STEPHEN BRADNER BURBANK '64

A.B., J.D.

elected 1980

Philadelphia, Pennsylvania

ELIZABETH PARKER POWELL '56

B.A., M.A., M.B.A.

elected 1980

Wellesley Hills, Massachusetts

FREDERICK W. BEINECKE, II '62

B.A., J.D.

elected 1980

New York, New York

THOMAS H. WYMAN '47

B.A.

elected 1980

New York, New York

Alumni Trustees

ALEXANDER B. TROWBRIDGE '47

A.B.

elected 1979 for three years

Washington, D.C.

PHILIP M. DRAKE '43

A.B., LL.B.

elected 1980 for four years

Greenwich, Connecticut

ANNE OLIVER JACKSON '53

A.B.

elected 1980 for four years

Sewickley, Pennsylvania

WILLIAM W. ROSENAU '47

B.A.

Ex Officio as President of the

Alumni Association

elected 1980 for two years

White Plains, New York

CLINTON J. KENDRICK '61

B.A., M.B.A.

Ex Officio as Chairman

of the Alumni Fund

elected 1981 for two years

Bedford, New York

Trustees Emeriti

SUMNER SMITH '08

A.B.

1956-1960

Lincoln, Massachusetts

HENRY WISE HOBSON '10

D.D., LL.D.

1937-1966 (President 1947-1966)

Cincinnati, Ohio

CHARLES STAFFORD GAGE '21

A.B., A.M.

1952-1976 (Treasurer 1966-1976)

New Haven, Connecticut

PHILIP KIRKHAM ALLEN '29

A.B.

1969-1980

Andover, Massachusetts

GEORGE BUSH '42

A.B.

1967-1980

Washington, D.C.

DONALD HOLMAN McLEAN, JR. '28

A.B., LL.B.

1958-1981 (President 1968-1981)

Andover, Massachusetts

JOHN LEWIS COOPER '31

A.B.

1968-1981

Dover, Massachusetts

HEADMASTER'S OFFICE

DONALD WILLIAM McNEMAR
Headmaster

B.A., M.A., Ph.D.

PETER QUACKENBUSH McKEE
Associate Headmaster
A.B., Ed.M.

SARAH M. GATES
Assistant to the Headmaster
A.B.

JANE H. MUNROE
*Executive Secretary to the
Headmaster*

OFFICE OF THE DEAN OF FACULTY

JOHN RICHARDS, II
Dean of Faculty
A.B., M.A.T.

WILLIAM FRANKLIN GRAHAM
Clerk of the Faculty
S.B.

JOAN C. MURTAGH
Secretary to the Dean of Faculty

OFFICE OF THE DEAN OF STUDIES

PHYLLIS WENDOVER POWELL
Dean of Studies
A.B., A.M.

HERBERT HARRY MORTON, III
Registrar
A.B.

DAVID A. PENNER
Scheduling Officer
A.B., M.A.

JOAN F. SCHLOTT
Recorder
B.S.

DEANS OF THE RESIDENTIAL CLUSTERS

DAVID OWEN COBB
Dean of Residence
A.B., A.M.

CARROLL WESLEY BAILEY
Abbot Cluster
A.B., J.D.

STEPHEN DOUGLAS CARTER
Pine Knoll Cluster
ScB., M.A.L.S.

CAROL CAMERON RICHARDS
Rabbit Pond Cluster
A.A.

JONATHAN A. STABLEFORD
West Quadrangle South Cluster
A.B., M.A.T.

SYLVIA L. THAYER
Flagstaff Cluster
A.B.

JAMES ROBERT WILSON
West Quadrangle North Cluster
B.S., A.M., Ph.D.

BUSINESS OFFICE

GEORGE A. NEILSON, JR.
Business Manager
B.S., M.Ed.

SUSAN G. COMSTOCK
Assistant Business Manager
B.A., M.C.R.P.

DONALD HENRY BADE
Comptroller
B.B.A.

OFFICE OF ADMISSIONS AND FINANCIAL AID

JOSHUA LEWIS MINER
Dean of Admissions
A.B.

MEREDITH PRICE
Associate Dean of Admissions
A.B., M.A.T.

JOHN C. McCLEMENT
Director of Financial Aid
A.B., M.Ed.

JEAN C. McKEE
Admissions Coordinator
A.B.

JAN BURTON
Admissions Officer
B.A.

REBECCA CARR
Admissions Officer
B.A.

FRANK F. DiCLEMENTE
Liaison with Alumni Representatives
S.B.

ROBERT P. HULBURD
Admissions Officer
A.B., M.A.

THOMAS G. SPEERS, III
Admissions Officer
B.A.

FACULTY

The date following the name indicates the year the instructor joined the Andover faculty. This list reflects the faculty for the 1981-82 school year.

DONALD WILLIAM McNEMAR
(1981)

Headmaster; Instructor in History and the Social Sciences
B.A., Earlham; M.A. Princeton;
Ph.D. Princeton

PETER QUACKENBUSH McKEE
(1947)

Associate Headmaster; Chairman Physics Dept.; Chairman Science Division, Instructor in Physics on the Donna Brace Ogilvie Teaching Foundation
B.A. Middlebury; Ed.M. Harvard

DOROTHY Y. JUDD (AA 1948)

Instructor in Spanish
B.S. William and Mary;
M.A. Columbia; M.A. Middlebury

GORDON GILMORE BENSLEY
(1949)

Instructor in Art on the Ammi Wright Lancashire Foundation
A.B. Yale

JOHN RICHARD LUX (1949)

Chairman Mathematics Department, Instructor in Mathematics on the Walter Scott Leeds Teaching Foundation

B.S. Pennsylvania State University; M.S. Ed. University of Pennsylvania

SHIRLEY J. RITCHIE (AA 1950)

Assistant Director of Physical Education, Instructor in Physical Education
B.S. Trenton State College

FREDERIC ANNESS STOTT
(1951)

Secretary of the Academy
A.B. Amherst

PHILIP BROWNLIE WELD (1951)

Chairman Chemistry Department, Instructor in Chemistry and Physics on the George Peabody Foundation
B.E. Yale; M.S. University of Michigan

WILLIAM FRANKLIN GRAHAM
(1952)

Clerk of the Faculty; Instructor in Mathematics
S.B. University of Michigan

FRED HAROLD HARRISON (1952)

Instructor in History and the Social Sciences on the Samuel Harvey Taylor Foundation
A.B. Yale; A.M. Trinity

JOHN CLAIBORNE McCLEMENT
(1952)

Instructor in Mathematics on the Cecil F.P. Bancroft Foundation; Director of Financial Aid
A.B. Yale; M.Ed. University of Pittsburgh

JOSHUA LEWIS MINER, III (1952)

Dean of Admissions
A.B. Princeton

JAMES HAROLD COUCH (1953)

Instructor in Spanish
A.B., M.A. University of Wyoming

SHERMAN FREDERICK DRAKE (1953)

Instructor in Mathematics on the Emilie Belden Cochran Foundation
B.S. U.S. Naval Academy; Ed.M. Boston University

EDMOND EMERSON HAMMOND, JR. (1953)

Instructor in Mathematics on the Jonathan French Teaching Foundation
S.B. Haverford; Sc.M. Brown

LOUIS JOHN HOITSMA, JR. (1953)

Instructor in Mathematics
B. S., Ed.M. William and Mary

ROBERT PENNIMAN HULBURD (1953)

Admissions Officer
A.B. Princeton; M.A. Middlebury

ROBERT EDWIN LANE (1955)

Instructor in Latin and Russian on the Alfred Ernest Stearns Foundation
B.A., M.A. University of California at Berkeley

HAROLD HOLMES OWEN, JR. (1955)

Instructor in English and Theatre
A.B. Amherst; M.A. University of New Hampshire

THOMAS JOSEPH REGAN (1955)

Instructor in English on the Frederick W. Beinecke Teaching Foundation
B.A. Yale; M.A. Boston University

- FRANK McCORD ECCLES (1956)
Instructor in Mathematics on Independence Teaching Foundation Endowment
B.S.M.E. Princeton; M.A. Harvard
- HARRISON SCHUYLER ROYCE, JR. (1956)
Instructor in History and the Social Sciences
A.B. Amherst; M.I.A. School of International Affairs, Columbia
- GERALD SHERTZER (1957)
Instructor in Art
B.F.A., M.F.A. Yale
- GEORGE WILLIAM BEST (1958)
Instructor in Mathematics
B.S. Union College; A.B. Boston University
- CLEMENT MORELL (1958)
Instructor in Mathematics
B.A. Northern Michigan; M.A. University of Michigan; M.S. University of Illinois
- JOHN RICHARDS, II (1959)
Dean of Faculty; Instructor in History and the Social Sciences on the Alfred Lawrence Ripley Foundation
A.B., M.A.T. Harvard
- JOHN PATTEN CHIVERS (1960)
Chairman, German Department; Instructor in German
A.B. Wesleyan; A.M. Middlebury
- CARL EDWARD KRUMPE, JR. (1960)
Instructor in Classics and History
A.B. Wabash College; A.M. Brown
- THOMAS REES (1960)
Instructor in Chemistry
B.E., M.S., Ph.D. Yale
- GEORGE HOWARD EDMONDS (1961)
Instructor in English
A.B. Amherst; Ed.M. Harvard
- MARY SOPHIA MINARD (AA 1961)
Instructor in History and the Social Sciences
B.A. Smith; M.A.L.S. Wesleyan
- ALFRED JAMES COULTHARD (1962)
Instructor in Physical Education
S.B. Calvin Coolidge
- ROBERT ANDREW LLOYD (1962)
Instructor in Art on the Independence Teaching Foundation Endowment
B.A. Harvard; M.Arch. Harvard Graduate School of Design
- ALANSON PERLEY STEVENS, III (1962)
Instructor in Russian and German
B.A. Dartmouth; M.A. Yale
- THOMAS TOLMAN LYONS (1963)
Chairman, Department of History and the Social Sciences; Instructor in History and the Social Sciences on John Mason Kemper Foundation
B.A., M.A.T. Harvard
- BARBARA McDONNELL (1963)
Acquisitions Librarian
A.B. Boston University; B.L.S. Simmons
- MEREDITH PRICE (1963)
Associate Dean of Admissions; Instructor in English
A.B., Amherst; M.A.T. Harvard
- JEAN MARY ST. PIERRE (AA 1963)
Instructor in English
A.B. Wheaton; M.A. Columbia
- ALEXANDER ZABRISKIE WARREN (1963)
Instructor in Mathematics
A.B. Harvard; M.A.L.S. Wesleyan
- CHRISTOPHER CAPEN COOK (1964)
Director of the Addison Gallery of American Art; Instructor in Art
A.B. Wesleyan; M.F.A. University of Illinois
- DANIEL DRETZKA OLIVIER (1964)
Instructor in French
A.B. Haverford; M.A. Middlebury
- VINCENT PASCUCCI (1964)
Chairman Division of Modern Language; Instructor in Classics and Modern Languages on the John Charles Phillips Foundation; Chairman Italian Department
A.B., M.A. Columbia; Ph.D. Brown
- AUDREY NYE BENSLEY (AA 1965)
Instructor in Art
- RONN NELS MINNÉ (1965)
Instructor in Chemistry on the Martha Cochran Foundation
B.S., A.M. Northwestern; Ph.D. Harvard
- ANGEL RUBIO Y MAROTO (1965)
Chairman, Spanish Department; Instructor in Spanish on Elizabeth Milbank Anderson Foundation
Titulo de Bachiller, Titulo del Magisterio, Universitario, Madrid; M.A. Washington University
- CRISTINA ALONSO RUBIO (AA 1965)
Instructor in Dance
Licensed by the Spanish Academy of Performing Arts
- NATHANIEL BALDWIN SMITH (1965)
Instructor in Mathematics
B.S.E. Princeton
M.A. Northwestern
- HALE STURGES, II (1965)
Instructor in French
A.B. Harvard; M.A. Middlebury
- THOMAS EDWARD CONE, III (1966)
Instructor in Biology
B.S. Trinity; M.A.T. Brown
- MICHAEL EDWARD MOSCA (1966)
Director of Accounting
B.A., M.B.A. Boston University
- DAVID ALBERT PENNER (1966)
Scheduling Officer; Instructor in Mathematics
B.A. Amherst; M.A. University of Maryland
- JOHN GIBSON TOMLINSON (1966)
Director of Energy Conservation
B.S. U.S. Military Academy
- KENNETH KELLY WISE (1966)
Chairman, English Department; Instructor in English on the William M. Newman Teaching Foundation
B.A. Purdue; M.A. Columbia
- JAMES LEIGHTON BUNNELL (1967)
Director of Summer Session; Instructor in History and the Social Sciences
A.B. University of the South; A.M. Vanderbilt
- JOSEPH BELLEAU WENNIK (1967)
Director of Athletics on the John H. Castle, Jr. Instructorship; Instructor in German
B.A. Yale; M.A. Middlebury
- HILDA STROOP WHYTE (AA 1967)
Instructor in Physical Science
B.S. Michigan State University; M.S. Tufts
- JAMES ROBERT WILSON (1967)
Dean of West Quadrangle North Cluster; Instructor in Chemistry
B.S. Stanford; A.M., Ph.D. Harvard
- SAMUEL IRVINE ALLISON ANDERSON (1968)
Instructor in French
A.B. Harvard; Diplome d'etudes Universite de Paris; A.M. Columbia; M.A. Massachusetts; M.A. Middlebury

DAVID OWEN COBB (1968)
Dean of Residence; Instructor in English

A.B. University of Maine;
A.M. Middlebury

FRANK LEE HANNAH (1968)
Instructor in Mathematics
A.B., A.M. Dartmouth

MARJORIE ALEXANDER HARRISON
(AA 1968)
Instructor in Physical Education;
Director of the Work Program
A.B. Connecticut College

ALOYSIUS JOHN HOBAUSZ (1968)
Director of the Audio-Visual Center
S.B. Puskas Telecommunication
Institute, Budapest

NICHOLAS VAN HOUTEN KIP (1968)
Chairman, Classics Department
Instructor in Classics
A.B. Princeton; M.A. Trinity

CATHERINE JEANNE KIRKLAND
(AA 1968)
Chairman French Department;
Instructor in French on Richard A.
Lumpkin Bicentennial
Instructorship
Licence es Lettres, Maitrise,
Sorbonne

SUSAN McINTOSH LLOYD (AA 1968)
Instructor in History and the Social
Sciences and Music on Marguerite
Capen Hearsey Instructorship
A.B., Radcliffe; M.A.T., Harvard

JOHN KENNEDY McMURRAY (1968)
Chairman Art Department; Instructor
in Art
B.A. Washington and Lee;
M.A.T. Harvard

RICHARD STOCKTON MacNEISH
(1968)
Archaeology Research Associate
A.B., M.A., Ph.D. University of
Chicago

CHARLES EMORY APGAR, III (1969)
Instructor in Physics
A.B. Earlham; M.A.T. Brown

SUSAN B. CLARK (AA 1969)
Instructor in Classics and History
A.B. Swarthmore; M.A. Yale

MARION FINBURY (AA 1969)
Director of College Counseling
A.B. Vassar

THOMAS ROBERT HAMILTON (1969)
Chairman Biology Department;
Instructor in Biology
B.S. Tusculum College; M.S.
University of Pennsylvania;
M.A.T. Brown

GEORGES NICOLAS KRIVOBOK
(AA 1969)
Chairman, Russian Department;
Instructor in French and Russian
B.A. Swarthmore; M.A.
Middlebury

CARROLL WESLEY BAILEY (1970)
Dean of Abbot Cluster; Instructor in
English
A.B., J.D. University of Pittsburgh

PETER JOSEPH BALEYKO (1970)
Assistant to the Comptroller
S.B. Boston College

FRANCIS EMANUEL BELLIZIA, JR.
(1970)
Chairman, Department of Theatre and
Dance; Instructor in Theatre
A.B. Dartmouth; A.M. Middlebury

PAUL KALKSTEIN (1970)
Instructor in English
A.B. Princeton; M.A.T. Yale

HENRY BOND WILMER, JR. (1970)
Instructor in French
B.A. Davidson; M.A. Middlebury

DOUGLAS EVERETT CRABTREE
(1971)
Instructor in Mathematics
A.B. Bowdoin; M.A. Harvard;
Ph.D. University of North
Carolina

ROBERT LEE CRAWFORD (1971)
College Counselor; Instructor in
History and the Social Sciences
B.A. Northwestern; S.T.B.
The General Theological
Seminary; M.A. University of
Pennsylvania

GLENN FRANK BASTIAN (1972)
Instructor in Biology and Theatre
A.B. University of Pittsburgh

GEORGE MACNAMARA DIX (1972)
Instructor in Modern Languages
A.B. Brown; A.M. Middlebury

BARBARA E. HAWKES (AA 1972)
Instructor in Biology
A.B. Tufts; M.S. Northeastern

HENRY LYNN HERBST (1972)
Instructor in French
A.B. Hamilton; A.M. University
of Pennsylvania

ALEXANDRA REWIS KUBLER-
MERRILL (AA 1972)
Chairman Psychology Department;
Counselor and Instructor in
Psychology on Abbot Academy
Teaching Foundation
B.A. Smith; M.A.T. Yale

GEORGE A. NEILSON, JR. (1972)
Business Manager
B.S., M.Ed. Boston University

STEPHEN B. WICKS (AA 1972)
Instructor in Art

LESLIE BALLARD (1973)
Instructor in Chemistry and Biology
B.A. Sarah Lawrence; M.A.T.
Harvard

YOLANDE BAYARD (1973)
Instructor in French
B.S., M.A. Central Connecticut
State College

ROBERT PETER PERRIN (1973)
Instructor in Mathematics and Physics
B.S., Ph.D., Massachusetts
Institute of Technology

EDWIN GUSTAVUS QUATTLEBAUM,
III (1973)
Instructor in History and the Social
Sciences
A.B. Harvard; M.A. Ph.D.
University of California

NANCY FAUST SIZER (1973)
Instructor in History and the Social
Sciences
B.A. Wellesley; M.A. Harvard

ELWIN SYKES (1973)
Director of (MS)² Program; Instructor
in English on the John H. Porter, Jr.
Bicentennial Instructorship
A.B., M.A. Harvard

PRISCILLA KEENE BELLIZIA (1974)
Graham House Study Counselor
A.B. Bates; M.A.T. Brown

CAROLYN B. BRECHER (1974)
Instructor in Modern Dance; Assistant
in Audio-Visual
A.B. Bard

PATRICIA HOPE EDMONDS (1974)
Foundations & Corporations Officer
A.B. Mount Holyoke; M.A.T.
Radcliffe

Faculty

- CHRISTOPHER JUDE GURRY (1974)
Instructor in History and the Social Sciences
A.B. Harvard; M.A. Tufts
- SALLY CHAMPLIN HERBST (1974)
Instructor in French
A.B. Mount Holyoke
- MARC DANA KOOLEN (1974)
Instructor in Biology
B.S. St. Lawrence; M.S. Purdue
- JEAN CRAWFORD McKEE (1974)
Admissions Coordinator
B.A. Middlebury
- ELAINE SPATZ-RABINOWITZ (1974)
Instructor in Painting
B.A. Antioch; M.F.A. Tufts
University and Museum School
- NATALIE GILLINGHAM SCHORR (1974)
Instructor in French
B.A. McGill; d.e.s., Aix-Marseille;
M.A. University of Pennsylvania
- WILLIAM E. THOMAS (1974)
Chairman Music Department;
Instructor in Music
B.A. Oberlin; M.F.A. Pennsylvania
State University
- BARBARA LEE WICKS (1974)
House Counselor
- DONALD H. BADE (1975)
Comptroller
B.B.A. University of Wisconsin
- HELEN M. ECCLES (1975)
Director of Public Information
A.B. Bryn Mawr
- HERBERT HARRY MORTON, III (1975)
Registrar; Instructor in Mathematics
A.B. Dartmouth
- SANDRA URIE THORPE (1975)
Associate Secretary of the Academy and
Executive Director of Annual Giving
A.B. Stanford
- RICHARD H. WILSON, JR. (1975)
Instructor in Music
B.A. Harvard; M.Mus. New
England Conservatory of Music
- VINCENT B.J. AVERY (1976)
Chairman, Department of Philosophy
and Religious Studies; Instructor in
Religion and Philosophy; Dean
Short Term Institutes
S.T.L., Ph.D., Academia
Alphonsiana, Rome
- ELAINE RANKIN BAILEY (1976)
Associate Cluster Dean
B.A. William and Mary
- SARAH ANNE DOOLITTLE (1976)
Instructor in Physical Education
B.S. Ed. Northeastern
- JANETTE ELIZABETH HANNAH (1976)
House Counselor
M.A. Edinburgh University
- SUZANNE EDDY KIP (1976)
House Counselor
- MICHAEL ALLEN LOPES (1976)
Instructor in English
B.A. University of California at
Berkeley; M.A. State University
of New York at Stony Brook
- HARRISON FAIRFIELD McCANN (1976)
President, School Year Abroad
B.A. Williams; M.A. Middlebury
- PHYLLIS WENDOVER POWELL (1976)
Dean of Studies; Instructor in History
and the Social Sciences
B.A. Wellesley; M.A. Harvard
- CAROL CAMERON RICHARDS (1976)
Dean, Rabbit Pond Cluster; House
Counselor
A.A. Bennett
- JONATHAN A. STABLEFORD (1976)
Dean of West Quadrangle South
Cluster; Instructor in English
B.A. Williams; M.A.T. Wesleyan
- REBECCA MILLER SYKES (1976)
House Counselor
A.B. Radcliffe
- EVERETT E. GENDLER (1977)
Jewish Chaplain; Instructor in Religion
and Philosophy
B.A. University of Chicago; M.H.L.
Jewish Theological Seminary
- LOUIS M. BERNIERI (1977)
Instructor in English
A.B. Harvard; M.A. Middlebury
- THOMAS SALKALD HODGSON (1977)
Instructor in Religion and Philosophy
B.A. Williams; M.A. Yale
- REBECCA D. McCANN (1977)
Instructor in Spanish
A.B. Lake Erie; M.A. Middlebury
- DAVID B. POTTLE (1977)
Instructor in Classics; Assistant
Director of Summer Session
B.A. Northwestern; Ph.D., Tufts
- RUTH QUATTLEBAUM (1977)
Instructor in Art
Archivist
A.B. Wheaton; M.A. Columbia
- JAMES L. SHELDON (1977)
Curator of Photography
A.B. Cornell
- DIANE L. SOUVAINE (1977)
Instructor in Mathematics
A.B. Radcliffe; M.A.L.S.
Dartmouth
- JANE WHEELER (1977)
Curator of the R.S. Peabody
Foundation for Archaeology;
Instructor in Archaeology
B.A. The American University;
Ph.D. University of Michigan
- CHARLES ALLEN WILLAND (1977)
Instructor in Biology
B.S. Brown; M.S. University of
South Carolina
- J. PHILIP ZAEDER (1977)
Protestant Chaplain; Instructor in
English
B.A., M.Div. Yale
- JEANNE E. BUSSIERE (1978)
Instructor in English
B.A. Dartmouth; M.A. University
of London, Queen Mary College
- DAVID M. GRAHAM (1978)
Instructor in Physical Education;
Assistant to Athletic Director
B.S. Miami University of Ohio
M.Ed. East Stroudsburg
- MARY M. GRAHAM (1978)
House Counselor
- SUSAN BROWNELL HODGSON (1978)
House Counselor
B.A. Wellesley; M.A. University of
Connecticut
- MARY J. MCCARTHY (1978)
Instructor in Art
A.A. Bay Path Junior College;
B.A. William Paterson College
- DIANA I. McNAB (1978)
Instructor in Physical Education
B.S. State University of New York
at Buffalo; M.Ed. Boston
University
- GERALDINA MATTIA (1978)
Instructor in Physical Education
B.S. East Stroudsburg State College

RANDALL S. PEPPER (1978)
Instructor in English
 B.A. Washington & Jefferson; M.A.
 University of New Hampshire
 (SYA Barcelona 1981-82)

BRUCE SMITH (1978)
Instructor in English
 B.A., M.A. Bucknell

ALEXANDER L. THEROUX (1978)
*Roger F. Murray Instructor in English
 and Writer in Residence*
 B.A. St. Francis; M.A., Ph.D.
 University of Virginia

JEANNE AMSTER (1979)
*Instructor in History and the Social
 Sciences*
 A.B. Mt. Holyoke; M.A. Stanford

CAROLE BRAVERMAN (1979)
Instructor in English
 B.A. Brooklyn; M.A. Purdue

ANDREW J. CLINE (1979)
Instructor in Mathematics
 B.A. College of Wooster

ALBERT COONS (1979)
Instructor in Mathematics
 B.A. Johns Hopkins

DONALD M. DUNBAR (1979)
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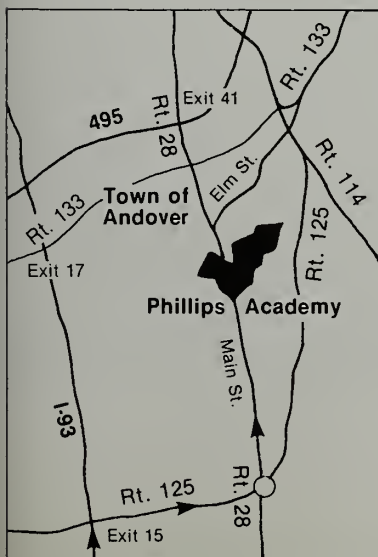
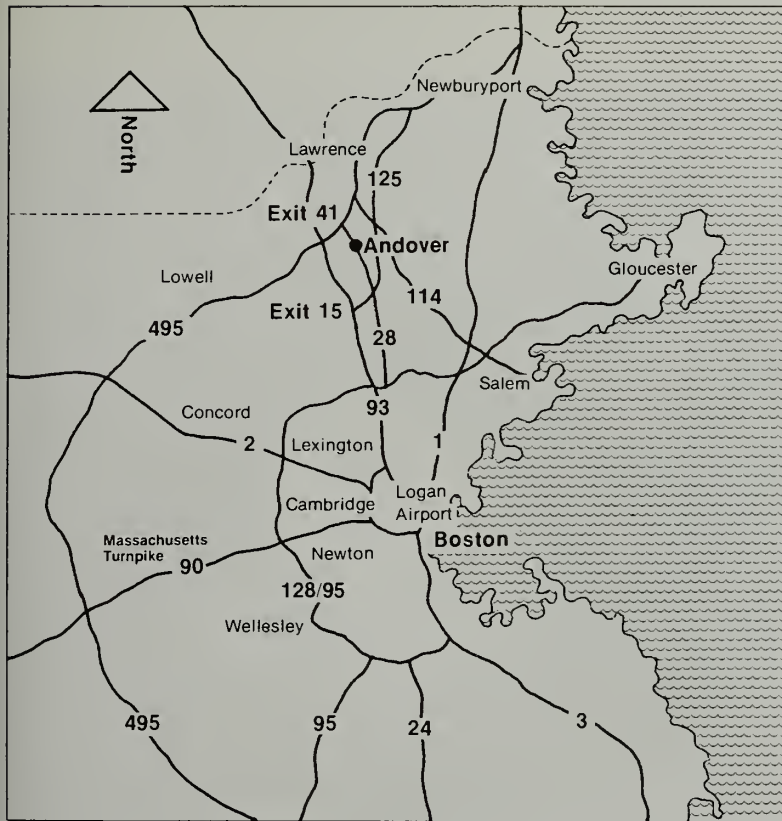
TRAVELING TO ANDOVER

If traveling by car from Boston, take Route 93 north for about 19 miles. Take Exit 15, then turn right (east) on Route 125 for 2 miles. Turn right onto Route 28 and go north about 4 miles to the Andover campus. Turn right at the Bell Tower on the corner of Route 28 and Salem Street. The Admissions Office is the first building on the right.

If driving from Logan Airport, follow the signs to Boston via the Sumner Tunnel and follow Route 93 north signs.

From Route 495 north or south take the exit marked Andover and proceed south on Route 28 through the town of Andover. The Phillips Academy campus is approximately one mile south of the Andover center. Turn left on Salem Street, by the Bell Tower.

The Trombly Motor Coach Service runs buses to Andover from the Trailways Bus Terminal, 555 Atlantic Avenue, Boston. Visitors should call the bus terminal in Boston 617/482-6620 for up-to-date information.



Inns and Motels in the Area

Andover Inn
Chapel Avenue, Andover
617/475-5903

Holiday Inn
Winthrop Avenue
Lawrence
617/686-9411

Koala Inn
River Road
Andover
617/685-6200

Sheraton Rolling Green Motor Inn
Lowell Street, Andover
617/475-5400

Merrimack Valley Motor Inn
Route 125, Chickering Road
North Andover
617/688-1851



ANDOVER

INDEX TO BUILDINGS

- 1 Abbey House*

2 Abbot Hall

3 Abbot Stevens House*

4 Adams Hall*

5 Addison Art Gallery

6 Alfred E. Stearns House*

7 Alice T. Whitney House*

8 Alumni House*

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10 America House*

11 Andover Cottage*

12 Andover Inn

13 Arts and Communications Center

14 Bancroft Hall*

15 Bartlet Hall*

16 Benner House (Art)

17 Bertha Bailey House*

18 Bishop Hall*

19 Blanchard House*

20 Borden, Memorial and Abbot Gymnasiums

21 Bulfinch Hall (English)

22 Burrth House*

23 Carter House*

24 Case Memorial Cage

25 Chapin House*

26 Churchill House*

27 Claude M. Fuess House*

28 Clement House*

29 Cochran Chapel

30 Commons (Dining Hall)

31 Cooley House

32 Day Hall*

33 Double Brick House*

34 Draper Cottage

35 Draper Hall

36 Eaton Cottage*

37 Elbridge Stuart House*

38 Evans Hall (Science)

39 Flagg House*

40 Foxcroft Hall*

41 French House*

42 Frost House*

43 George Washington Hall

44 Graham House (Psychology)

45 Graves Hall (Music)

46 Hall House*
- 47 Hardy House (Admissions Office)

48 Henry L. Stimson House*

49 Isham Infirmary*

50 Johnson Hall*

51 Junior House*

52 Memorial Bell Tower

53 Morse Hall (Mathematics)

54 Morton House* (Alumnae)

55 Nathan Hale House*

56 Newman House*

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59 Office of Physical Plant

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68 Power Plant

69 R.S. Peabody Foundation and Archaeological Museum

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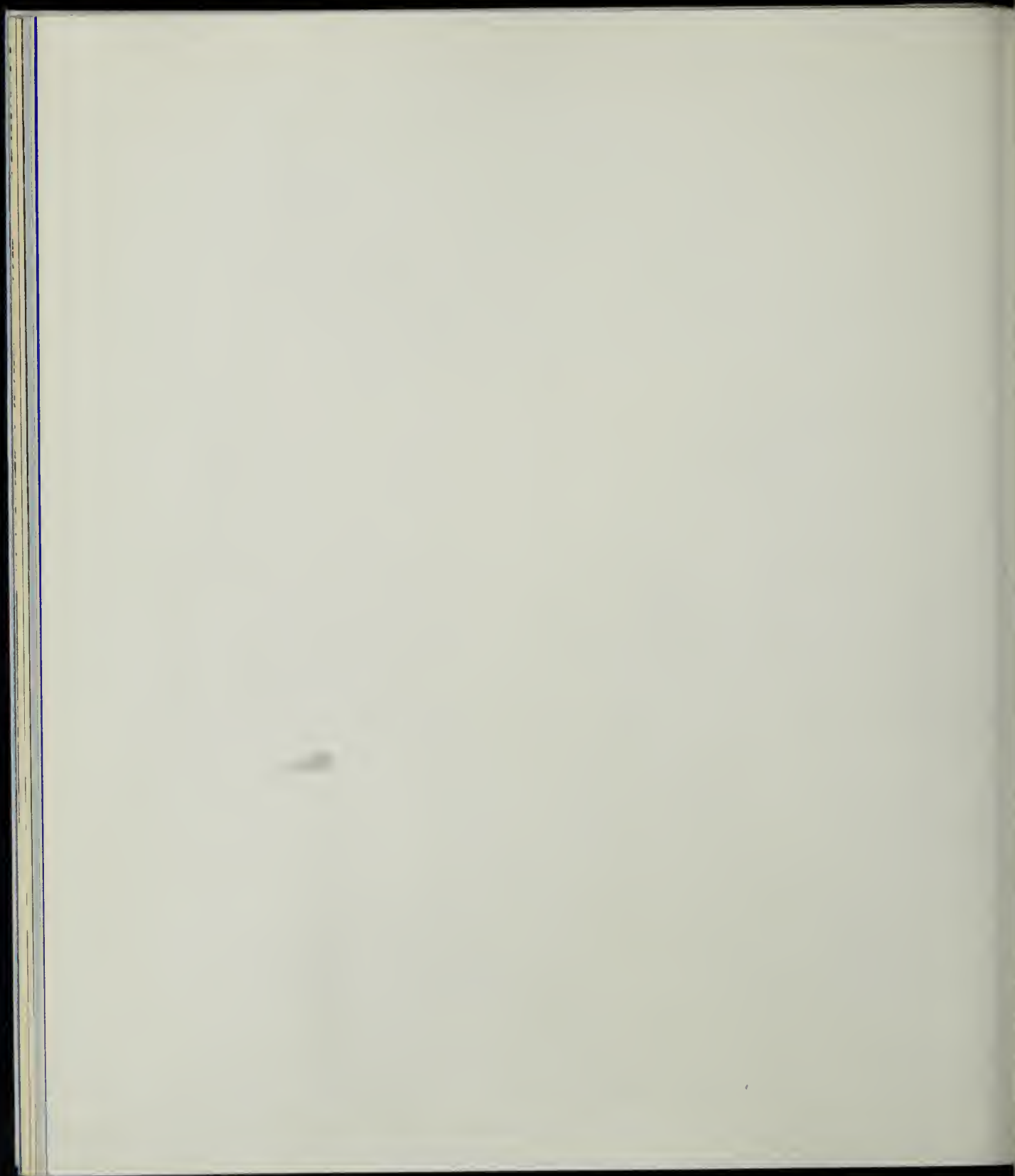


C#3
1982-83

Andover

Course of Study

Phillips Academy



Course of Study 1982-1983

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Course of Study

The curriculum of Phillips Academy comprises a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Placement in the year-level of a subject may be independent of a student's grade in school; through advanced placement at entrance or accelerated courses, many students fulfill requirements ahead of the normal year, thereby gaining increased opportunity for college-level or other elective courses. Instruction is given in all subjects usually required for entrance to higher institutions.

Classroom groups are small enough to permit individual attention, and students are placed in sections fitted to their skill level. Accelerated sequences and advanced courses offer particularly able and well-prepared students opportunity to progress at a rate commensurate with their ability and ambition. Most departments offer courses beyond the level of preparation for college.

For full membership in a given class, students should have credit for the work of the lower classes or its equivalent. However, students are rated as members of a given class if their deficiencies for full membership in it do not exceed a certain number of trimester courses.

Every student is assigned to an Academic Advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements, and the student's particular interests. Students should familiarize themselves with the Academy's basic curriculum—both its requirements and its flexibility.

Members of the Upper Middle and Senior classes should become aware of the entrance requirements of the colleges they may wish to enter.

The Trimester Plan

The academic year is separated into three trimesters. There are two types of weekly class schedules: one during which classes meet only Monday through Friday, and the other during which classes also meet on Saturday morning. There are roughly equal numbers of these five and six-day weeks in each trimester. Within a given week classes are scheduled to meet

according to varying patterns: some for four fifty-minute periods; others for five such periods; and a few seminar and studio courses for two two-hour blocks. Many departments offer year-long courses as well as those which are term-contained (completed in one trimester). The diploma requirements are stated in terms of full-year courses or trimester courses, depending on the academic area involved.

Special Courses in Foreign Languages

Special courses covering the work of two years in one are open to qualified Seniors in German, Greek, Italian, Latin, Russian, and Spanish. These 10-20 courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and therefore are not recommended for students of limited language ability. Entering Seniors with no previous foreign language experience must pass a 10-20 course as a diploma requirement.

Accelerated Sequences and Advanced Placement

The Andover curriculum offers accelerated sequences in most departments. It provides special programs in Latin, Greek, and the modern foreign languages, designed to cover four years' work in three—or five years' work in four. The programs are open, on invitation of the departments, to especially able and ambitious students.

A large number of Phillips Academy students take College Board Advanced Placement Tests in May to establish advanced placement in college courses or credit toward the college degree.

Advanced Placement Examinations are offered in: American History, Art History, Chemistry, English, European History, French, German, Latin, Mathematics, Music, Physics, Spanish, and Studio Art (portfolio).

Independent Projects

With the approval of the Dean of Studies and in accordance with requirements established by the Faculty, a student may substitute independent work for some portion of the normal course load. An independent project may replace a given course for up to

three trimesters of a student's stay at the Academy, or may replace all course during a given trimester. In either case, the work is done under the supervision of a member of the Faculty.

Off-Campus Programs and Projects

The school offers several off-campus residential programs. The *Washington Intern Program*, in which Andover joins with Exeter, allows a group of Upper Middlers and Seniors to spend the Spring Term living together in Washington and working in the offices of U. S. Senators and Congressmen. (See *History 300*.)

Students enrolled in Spanish at the third level or higher may elect a residential Winter Term of study in Mexico. (See *Spanish 35*.)

Selected students of French may spend the Winter term in Antibes, France, attending local schools and residing with a family in the city.

In addition to school-sponsored programs, the trimester plan provides an opportunity for individual Seniors to arrange off-campus projects related to their special interests. Some Seniors have worked as interns with officials in local government and members of the Massachusetts legislature. Others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative in the investigation of opportunities and careful planning of a course of study that will meet diploma requirements and also free a block of time during the appropriate term.

School Year Abroad

Students may elect to spend their Upper Middle or Senior Year studying in France or Spain with *School Year Abroad*, originated as an off-campus program by Andover, later joined as a sponsor by Exeter and St. Paul's. Students live with host families while pursuing a course of study under the supervision of teachers from the three original sponsoring schools. Although *School Year Abroad* is now an independent program, it provides students with courses that earn full academic credit at Andover and with the experience of immersion in a foreign culture. Students wishing to participate should consult their Academic Advisor and the *School Year Abroad* office (located in Samuel Phillips Hall on the Phillips Academy campus) for guidance in the selection of courses for the years prior to and following the year abroad.

Summer Session

The *Andover Summer Session* is a six-week academic enrichment program for boys and girls of high school age. Students who wish to receive Phillips Academy credit for courses taken at the *Andover Summer Session* must receive prior approval from the chairman of the department involved.

Planning a Program of Studies at Andover

The following is designed to help Andover students and their parents to understand the curriculum, and to show the major decisions, and their consequences, which face students at each stage of the four-year academic program.

Workload

All new students are advised to carry only a normal program of five courses each term in the Junior, Lower Middle, and Upper Middle years. The requirement for the Senior year is four courses or the equivalent of the fourth course—that is, independent work equivalent to a course. Upper Middlers and Seniors may elect to adjust their workload by carrying four courses or five courses in any trimester during their last two years as long as the total for the two years comes to twenty-seven trimester units.

Academic Advising

Each student has an Academic Advisor; this member of the Faculty is responsible for counseling the student in the planning of his or her course of study at Andover. The Advisor meets with the student during the Orientation period prior to the opening of school in September to review the course selections which the student has made during the previous Summer or Spring. The Advisor must approve the selections for the Fall Trimester at this time, and those for the Winter and Spring Trimesters, respectively, during conferences held later in the year.

Within the diploma requirements, programs of study are determined by the student's long-range needs and aspirations—insofar as these can be identified. These needs may include college and career plans, strengths and weaknesses as revealed by previous performance and aptitude tests, and character and personal development.

In addition to the Academic Advisor, the House Counselor or Day Student Counselor must also approve the student's course selection for each trimester. From time to time during the academic year, the Counselor will report to parents concerning the student's growth and progress. Late each spring students in the three lower classes and their respective Academic Advisors will prepare a selection of courses for the coming year; a copy of this selection will be mailed to parents in June.

Although the student is ultimately responsible for the selection of his courses, the Academic Advisor will welcome any information and suggestions that parents may wish to offer.

Arena Day

Students register for their courses and selections in an arena setting before each term. Following meetings with their Academic Advisors, students make certain that the desired courses have sections scheduled that permit a conflict-free, workable daily program. Entrance into the arena is by classes and in numerical order according to a randomly chosen, pre-assigned number. Students are advised to have alternate selections in mind in the event that some of the desired sections are full; enrollment is on a first-come, first-served basis.

Diploma Requirements

The basic diploma requirement is the satisfactory com-

pletion of a four-year secondary school program, of which at least three trimesters must be at Andover; the student must be in good standing (not on Probation or under Suspension) at the time of graduation. A student who has been dismissed is ineligible for a diploma unless readmitted.

A student's required program normally includes nine trimester units of a foreign language, eight of mathematics, three trimester units of United States History, plus an additional trimester course in history taken at the Upper Middle or Senior level, a full-year course in a laboratory science, one trimester of art (usually *Visual Studies-Art 10*), one trimester of music (usually *The Nature of Music-Music 20*), and six trimesters of English, these to include a year-long course of competence in writing and reading and a three-trimester sequence of general literature. In order to be eligible for a diploma all students must satisfy the swim requirement of the Department of Athletics. Certain diploma requirements vary with the class level at which the student enters Phillips Academy. Entering Juniors and Lower Middlers must take a trimester course in physical education in addition to required athletics, and, beginning in September 1983, must take, prior to graduation, at least one trimester course offered by the Department of Philosophy and Religious Studies. Entering Upper Middlers need take only one trimester of either art or music at the Academy. Entering Seniors are not required to take either art or music. Some modifications of the language requirement are made for entering Upper Middlers and Seniors. Entering Seniors with no previous foreign language experience must pass a 10-20 course in a foreign language. A Senior must *pass* a minimum of twelve graded trimester courses during the Senior year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Independent Projects are counted as graded courses.

Credits (trimester units) required for diploma are:

<i>For Entering Juniors</i>	54
<i>For Entering Lower</i>	51
<i>For Entering Uppers</i>	48
<i>For Entering Seniors</i>	48

Newly Admitted Students

Students entering for their first year are sent placement material, including some forms for present teachers to complete and a self-administered diagnos-

tic test in elementary algebra. These items are used by the Academy to aid in proper placement or recommendation of course levels. New students are also asked to complete to the best of their ability a Course Selection form, indicating the courses that they wish to take during the coming year. Although the placement material may alter somewhat a student's preliminary selections, it is helpful, for planning purposes, to know the levels that each student thinks he is ready to enter.

The Main Choices at Each Stage of a Four-Year Program

While a student's program of studies is adapted each year to his changing situation, the *future consequences* of each course should be noted, for certain choices in one year open the way to later options and may close the door to others.

JUNIOR YEAR

Each trimester a Junior must take five courses, only one of which may be a Pass/Fail course. Students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring.

In selecting courses, students are reminded to check the diploma requirements. A Junior's program should resemble the following outline:

1. Math—begin sequence (usually *Mathematics 10* or *11*);
2. Foreign Language—begin sequence (usually a year-long course at the 10-level);
3. English—*English 10* (elective);
4. Elective [Art, Social Science, History, another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]
5. Elective [Art, Social Science, History, another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]

LOWER MIDDLE YEAR

Each trimester a Lower Middler must take five courses, only one of which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. A few students take the CEEB Achievement Tests during the Lower Middle year. In selecting courses, students are reminded to check the diploma requirements. A Lower's program should resemble the following outline:

New Students

1. Math—(usually *Mathematics 19* or *Mathematics 20*);
2. Foreign Language—enter the sequence by placement of the department;
3. English—begin sequence (*Competence*);
4. Elective [Art, Classics, History, another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]
5. Elective [Art, Classics, History, another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]

Returning Students

1. Math—continue the sequence (usually *Mathematics 20* (T2), 32);
2. Foreign Language—continue the sequence;
3. English—begin sequence (*Competence*);
4. Elective [Art, Classics, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Theatre, Dance.]
5. Elective [Art, Classics, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Theatre, Dance.]

N.B.

Students planning to be off-campus for a term (e.g., *Term in Mexico*, *Washington Intern Program* etc.) should make sure they have no year-long courses during that year. Students wishing to participate in the *School Year Abroad Program* during their Upper Middle year should discuss these plans with their Academic Advisor and seek guidance for the selection of courses for the Lower Middle Year.

UPPER MIDDLE YEAR

During the Upper Middle Year and the Senior Year, a student must accumulate a total of 27 units in blocks of four or five courses per trimester. A Pass/Fail course may be elected as a fifth course only.

New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many students take the CEEB Preliminary Scholastic Aptitude Tests in the Fall; all take the CEEB Scholastic Aptitude Tests in the Winter; and many take the CEEB Achievement Tests in the Spring of their Upper Middle year. Some also take the CEEB Advanced Placement Tests in the Spring of their Upper Middle Year. As a matter of general policy Academic Advisors encourage "depth" in the selection of courses for the Upper Middle Year. Most students satisfy their United States History requirement during their Upper Year. In selecting courses students

are reminded to check the diploma requirements. An Upper's program should resemble the following outline:

New Students

1. Math—(usually *Mathematics 30, 31, or 35*);
2. Foreign Language—enter the sequence by placement of the department;
3. English—begin sequence (*Competence*);
4. Elective [Archaeology, Art, Classics, another
5. Elective [English, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

Returning Students

1. Math—continue the sequence (usually *Mathematics 35 (T2)*);
2. Foreign Language—continue the sequence;
3. English—continue the sequence (usually *Lit B (T2), Lit C*);
4. History—usually *History 300 (T2), 301 (The United States)*;
5. Elective [Archaeology, Art, Classics, another English, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

N.B.

Students wishing to take an *Off-Campus Independent Project* for a trimester of their Senior Year must have no year-long courses during their Senior Year.

SENIOR YEAR

During the Upper Middle Year and the Senior Year, a student must accumulate a total of 27 trimester units in blocks of four or five courses per trimester. A Pass/Fail course may be elected only as a fifth course; however, an Independent Project, though marked on a Pass/Fail basis, is counted as a graded course.

A Senior must *pass* a minimum of twelve graded trimester courses during the Senior Year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Many Seniors retake the CEEB Scholastic Aptitude Tests in December and the CEEB Achievement Tests in January, and take the CEEB Advanced Placement Tests in May. In selecting courses students are reminded to check the diploma

requirements. A Senior's program should resemble the following outline:

New Students

1. Math—enter the sequence by placement of the department; if the requirement is not yet satisfied enter *Mathematics 40*;
2. Foreign Language—enter the sequence by placement of the department if the requirement is not yet satisfied;
3. English—usually *English 300-12*;
4. Elective [Archaeology, Art, Classics, another
5. Elective [English, History, another Math, a 10-20 Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

Returning Students

Usually most diploma requirements are satisfied. Careful selection of electives for continued depth in the student's chosen areas is encouraged.

Transferring and Dropping Courses

To transfer or drop a course, a student must obtain an official transfer slip from his or her Academic Advisor. This slip is then taken *as soon as possible* to the Scheduling Officer in George Washington Hall. Transfers into term-contained courses must take place during the first six calendar class days of the term. No course may be dropped after the end of the fourth week of classes of any term. Students wishing to drop year-long or T2 courses prior to the normal end of the course may do so only by gaining the approval of a group of five: the Department Chairman, the Dean of Studies, the student's House Counselor, Academic Advisor, and Instructor. Credit is granted at the discretion of the Department Chairman and only if the student is passing the course at the time it is dropped and only for that portion completed. Year-long and T2 courses are considered as long-term commitments.

Attendance

Students are expected to attend **all** academic classes.

Instructors, if approached in advance, are permitted (but not required) to excuse students from a class meeting if the absence from that meeting will not add to weekend time. Only Cluster Deans may give permission to extend weekend time, and they may do so without consulting Instructors.

Failed Courses

In most cases, continuing students may attempt to receive credit for a failed course by taking a make-up examination. Spring Term Senior Failures may be made up only following Commencement.

College Entrance Examination Board Test Dates

Tests will be held on campus in 1982-83 as follows:

October 23	PSAT/NMSQT (<i>Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test</i>)
November 6	SAT/ACH
December 4	SAT/ACH
January 22	SAT/ACH
May 7	SAT/ACH
June 4	SAT/ACH
May 16-20	AP (<i>Advanced Placement Examinations</i>)

Key to Course Designation

A course number ending in "0" denotes a year-long course (Example: *Math 10-0*). A number ending "123" indicates that the course is term-contained, but sequential, and may be taken for one, two, or three terms (Example: *Art 26-123*). A number ending in a single digit "1", "2", or "3" indicates a course, that is term-contained, but one that may be taken only once. (Example: *Music 20-2*). The designations 1, 2, and 3 indicate the trimesters during which the course is offered: 1 = Fall; 2 = Winter; 3 = Spring. Some courses require a two-term commitment; they are indicated by a "(T2)" following the course name (Example: *Physics 52-12 Advanced Physics (T2)*). Check carefully each course description for any other limitations: Prerequisites, permission of instructor or department chairman required, etc.

Immediately below each course number is a 4-digit number in parentheses. This identification number (often referred to as the "computer number") is used for data processing files and is required when a student registers for courses. The final digit of the computer number has roughly the same meaning as the last digit of the course number:

Final Digit:	Indicates:
0	Year-long course
1	Course offered in Fall Trimester
2	Course offered in Winter Trimester
3	Course offered in Spring Trimester
4	T2 course offered in Fall and Winter
5	T2 course offered in Winter and Spring

Course Descriptions

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers a term-contained course as an elective.

25—3 Archaeology (Not offered 1982-83.)

Four prepared classes. Open to Upper Middlers and Seniors. Limit 15 students. The course explores the methods archaeologists use to reconstruct pre-historic societies and to test general statements concerning how and why these societies came to be the way they were. In doing this, several major transformations in human society are considered, beginning with the society of the earliest men, and ending with the first civilizations. Lecture and class discussions are supplemented by visual aids and work with archaeological specimens. A brief excavation may be conducted locally.

Art

The diploma requirement in Art is as follows: entering Juniors and Lovers must take a trimester course in a Studio Art; an entering Upper must take a trimester course in a Studio Art or Music at the Academy; neither a Pass/Fail course nor an Art History Course is accepted as fulfilling the requirement. The basic course, *Visual Studies*, covers a broad range of material, is open to students of all abilities and experience, and is a **prerequisite** to almost all elective courses in Art. Exemption from this prerequisite is granted only on the basis of a portfolio of work judged satisfactory by the Chairman of the Department in collaboration with the teacher of the course which the student desires to enter. An acceptable portfolio should contain examples of two-dimensional work, three-dimensional work (slides or photographs are acceptable), and photography.

The College Entrance Examination Board offers students the opportunity to gain Advanced Placement in Studio Art in many colleges and Art Schools, thus enabling a student to by-pass basic design courses. Students must submit a portfolio of slides and original work to Princeton in May. Students interested in Ad-

vanced Placement should enroll in *Art 315-1* and two subsequent terms in Art.

Students wishing to apply for an independent project in photography will not be eligible until they have taken *Art 12*, *Art 26*, and two terms of *Art 306*.

With the exception of *Art 40* and *41*, no Art course, if failed, can be made up by examination.

Students should expect to help pay for art materials.

INTRODUCTORY STUDIO COURSES

10—1 Visual Studies

(0101) Five prepared class periods. **Not recommended**

10—2 **for Juniors.** In its emphasis on observation, interpretation, and organization, the basic course

(0102) is designed to supply an understanding of contemporary surroundings. Along with discussion

10—3 of design problems, the student receives experience in photography, drawing, two-

(0103) dimensional design, and three-dimensional construction. Previous experience in art is not required.

11—12 Visual Studies for Juniors (T2) (a two-term

(0114) commitment)

11—23 Four prepared periods. **Strongly recommended**

(0115) **for all Juniors.** The course will cover drawing, color, photography and an intensive exposure

to the Addison Gallery of American Art. The course will fulfill the diploma requirement in art and will serve as the

equivalent of *Art 10* as a **prerequisite** for other Art courses.

12—1 Introductory Photography

(0121) **Prerequisite:** *Visual Studies*. An introduction to

12—2 basic out-of-doors photography, the course covers

(0122) fundamentals of exposure, developing and

12—3 printmaking. A camera (35 mm. or 2 1/4) with

(0123) manually controlled speed, aperture and focus

is required; a light meter is not necessary.

Emphasis is on both darkroom technique and aesthetic quality. This course may be bypassed by students with previous experience through the presentation of a portfolio.

14—1 Introductory Ceramics

(0141) Four classes per week plus an evening studio.

14—2 Limit of ten students. Basic techniques of hand-

(0142) building, wheel-throwing, and glazing. Em-

14—3 phasis on the sculptural as well as the functional

(0143) possibilities of clay. At least one raku firing each

term, or a similar special project. No pre-

requisites, and does not fulfill the diploma requirement.

INTERMEDIATE STUDIO COURSES

Unless otherwise noted, the intermediate courses consist of four prepared classes each week. *Visual Studies* (Art 10) is a **prerequisite** for all intermediate courses.

20—1 Drawing and Two-Dimensional Design

(0201) **Prerequisite:** *Visual Studies* (Art 10). A course designed to develop drawing and two-dimensional composition skills. Drawing includes: life drawing, still life, and mono-printing. Two-dimensional design will deal with the organization of representational images, color, painting and collage. Continuation in *Drawing* (Art 20-23) or *Two Dimensional Design* (Art 23-23) in Winter or Spring is recommended. (Mr. Shertzer and Ms. Veenema)

20—23 Drawing

(0202) **Prerequisite:** *Visual Studies* (Art 10). A course
(0203) designed to develop observation and drawing skills in several media, based on the assumption that drawing is an end in itself as well as a skill basic to other media. Included: one life-drawing session each week. (Ms. Veenema)

23—23 Two-Dimensional Design

(0232) **Prerequisite:** *Visual Studies* (Art 10). The course
(0233) deals with one's ability to manipulate those elements most associated with the picture plane: color, line, shape, texture, and composition of flat materials. Work includes: 1) color—free studies and collages dealing with the structural and expressive nature of color; 2) drawing—exercises using pencil, pen, and brush, figure and landscape drawing; and 3) figure-ground—expanding the structural and illusionary aspects of figure-ground as an end in itself and as a basis for graphic and advertising design. (Mr. Shertzer)

24—23 Three-Dimensional Design (T2) (a two-term commitment)

(0245) **Prerequisite:** *Visual Studies* (Art 10). Industry, architecture and the crafts have required the development of professional design disciplines distinct from the fine arts. Joining aesthetic and scientific principles with knowledge of manufacturing and construction techniques, designing requires diverse skills and the ability to combine them. This course identifies some basic areas of concern—equilibrium, economy, function, scale—within an ecological frame of reference. In what ways have designers imitated nature? In what ways have they set themselves and their work against nature? How do economic, social, political and philosophical considerations influence design? Studio problems in design and construction will draw on the student's ability to learn

and apply problem-solving techniques creatively; discussion and written exercises will ask the student to think about design as it defines the human enterprise. An introductory course in physics, chemistry or biology, taken previously or concurrently, will be helpful. This course provides a basis for further study in engineering, architecture or those arts and crafts which, like sculpture or furniture design, involve construction. (Mr. Lloyd)

26—123 Intermediate Photography

(0261) **Prerequisite:** Art 12. An extension of *Introductory Photography*, the course goes deeper into
(0262) technical proficiency and aesthetic quality.
(0263) Technical aspects include metering techniques, black and white filters, exposure and printing contrast controls, various developing styles and darkroom deviations. A camera and light meter are required. The student will be exposed to the works of various photographers so that he may gain a better sense of his own photographic style and identity.

27—13 Animation (Formerly Art 21)

(0271) **Prerequisite:** *Visual Studies* (Art 10). An introduction to the art of illusion of motion through
(0273) shooting still images frame by frame with 16mm sound motion picture film, with emphasis on the relationship to the sound track in structuring the finished product. (Mr. McMurray)

HISTORY OF ART COURSES

40—1 History of Art: Painting and Sculpture

(0401) Four prepared class periods. For Uppers and Seniors. Although a survey of Western Art from the cave painter to contemporary, the course examines four present-day directions by studying the historical styles as roots leading up to our time, with an emphasis on the 20th Century. (Mr. Bensley)

41—2 History of Art: Architecture

(0412) Four prepared class periods. For Uppers and Seniors. A survey of architecture and engineering from priestly civilizations to the present, the course emphasizes the architectural style as an expressive outgrowth of the culture that produced it. Combined with Art 40-1, this course should prepare students for the Advanced Placement Examination in Art History. (Mr. Bensley)

ADVANCED STUDIO COURSES

Visual Studies (Art 10) is a prerequisite for all advanced courses.

300—123 Graphics and Photography

- (0701) **Prerequisites:** *Visual Studies (Art 10)*. Applying
(0702) photography to graphic arts, particularly
(0703) through photo-silkscreen, photo-etching, and
photo-lithography. Individual experimentation

is emphasized in an attempt to carry the expressive force of photography beyond darkroom techniques. (Mr. McMurray)

302—123 Painting

- (0721) **Prerequisite:** *Visual Studies (Art 10)*. An intro-
(0722) duction to the basic elements and techniques of
(0723) painting in oils and acrylics. Specific problems
are assigned to study the fundamentals of color,

form, composition and space in painting, as well as to encourage the student's individual expression. Class critiques and discussions, slides, reproductions, films and occasional field trips are also part of the course. Previous experience is helpful but not necessary; students are encouraged to sign up for the full year if possible. (Ms. Spatz-Rabinowitz)

303—2 Filmmaking

- (0732) **Prerequisite:** *Visual Studies (Art 10)* and *Introductory Photography (Art 12)*. This course combines

viewing theatrical, documentary, and art films for discussion and criticism with the production of individual or group student films in silent super-8. Course work will include developing film ideas, script-writing, shooting, cutting, editing, and class critiques. (Mr. Sheldon)

304—123 Advanced Ceramics

- (0741) **Prerequisite:** *Visual Studies (Art 10)*. For those
(0742) who are seriously interested in the total operation
(0743) from design to execution. Hand-building,
wheel-throwing, glazemaking (and some chemical

analysis), responsibility for loading and firing electric, gas, raku, and salt kilns. Assigned reading and occasional field trips. (Mrs. Bensley)

305—123 Printmaking

- (0751) **Prerequisite:** *Visual Studies (Art 10)*. Printmak-
(0752) ing deals with images developed through suc-
(0753) cessive stages using materials which by their
nature create images capable of duplication.

Students work in intaglio, relief, and stencil processes, and print both in black and white and in color. Print processes

covered include collagraph (plates made with collaged materials adhered to a base), metal plate processes (etching, dry point, and engraving), linoleum and wood-cut, and silk-screen. (Ms. Veenema)

306 Advanced Photography

Prerequisites: *Introductory Photography (Art 12)* and *Intermediate Photography (Art 26)*.

306-I-1 Photojournalism. A photograph is a multi- (0761) dimensional experience. It can serve to recall persons or events; it can inform, inspire, and

raise questions. It is a way of sharing an experience and one's relationship to it. The subject of this course is taking photographs that are deeply and personally felt and which, at the same time, can communicate to a wide audience. The commentary and images of several celebrated photographers will be presented for discussion. Projects will include individual photographs, essays, picture stories, journals, biographies, etc. While independent work is expected, some assignments will be given. (Mr. Wicks)

306-II-1 Large Format Photography. The special qual- (0771) ities of the large camera open up a new world of image making which alters the relationship of

306-II-3 photographer to subject and creates options (0773) different from the smaller formats. View camera

swings and tilts, perspective and depth of field control, sheet film processing, advanced metering and exposure methods, and techniques of the fine photographic print are covered. A survey of the aesthetic and stylistic development of photography in the nineteenth and twentieth centuries is taught. Students explore the many possible approaches to their own photography in this historical context. Extensive use is made of the Addison Gallery's collection of original photographs. 4 × 5 cameras are provided. (Mr. Sheldon)

306-III-2 Studio Photography. Concentrating on portrai- (0782) ture and fashion photography, studio strobes are used to achieve controlled lighting. Through

various darkroom techniques and manipulation, along with individual experimentation, an attempt will be made to express personal ideas. Utilizing professional models from Boston agencies, the course is an introduction to commercial photography. (Mr. Bensley, Ms. McCarthy)

306-IV-3 Photoillustration. Communication of thoughts, (0793) feelings, and dreams in an imaginative and per- sonal manner is the main goal of photoillustra-

tion. Through various darkroom techniques and manipulation, along with individual experimentation, an attempt will

be made to express personal ideas. Initial projects will be assigned to enhance experimentation and problem-solving, followed by independent work to be presented sequentially in book format. The course includes group critiques and discussion of works by several photographers. (Ms. McCarthy)

308—123 Sculpture

(0881) **Prerequisite:** *Visual Studies (Art 10)*. Offers an opportunity to work in practically every material available to the sculptor today, including wood, stone, metal, plastics, plaster, and others. It is therefore possible for students to develop into sculpture concepts discovered in *Visual Studies (Art 10)* or *Three-Dimensional Design (Art 24)* as well as ideas drawn from their own experience. Some outstanding work of recent classes include the "avocado" by Seymour House '73, a thirty-foot welded construction which is now a permanent addition to the Addison Gallery, a standing steel figure by Jamie Morgan '73, which was on display in the Headmaster's Office, and others. Individual criticism is stressed. (Mr. Shertzer)

309—3 Kinetics

(0893) **Prerequisite:** *Visual Studies (Art 10)*. A search for the aesthetics of movement. Individual inventiveness is stressed as students pursue projects directed toward devices that produce implied or real motion. Self-perpetuated problem-solving situations become one of the prime values and objectives of the course. (Mr. McMurray)

310—123 Architecture

(0901) **Prerequisite:** *Visual Studies (Art 10)*. For Uppers and Seniors. *Three-Dimensional Design (Art 24)* recommended, but not required. The design of structures for human habitation involves a variety of basic considerations. In the fall, the course will concentrate on functional analysis of sheltered spaces and their organization. The winter term will survey methods of enclosing spaces at different scale and construction techniques, including some architectural detailing. The spring term will combine knowledge gained in the previous terms in a project or projects simulating the experience of architectural practice. The course fills the needs of students who are considering architecture as a field of concentration as well as of those who desire familiarity with the basics of environmental design. Although students are encouraged to take the course for three terms, each segment is planned to accommodate enrollment for that term alone. (Mr. Lloyd)

311—3 Contemporary Communications

(0913) Four prepared class periods. The course examines some of the bases of communication

between and among people. Material includes fiction, non-fiction, poetry, drama, motion pictures, and the visual arts. **Prerequisites:** Successful completion of a course in art, music, or theatre. The course engages in group projects aimed at public presentation. (Mr. Owen, Mr. Lloyd)

314—3 Calligraphy: The Art of Lettering by Hand

(0943) **Prerequisite:** *Visual Studies (Art 10)*. A course designed to develop basic techniques of fine hand lettering beginning with Roman capitals and tracing the historical developments of letter construction, integrating form and function. Practical applications can range from simple matter quotations to illuminated manuscript work. (Mrs. Quattlebaum)

315—1 Advanced Placement in Studio Art

(0951) **Prerequisite:** *Visual Studies (Art 10)*. For Seniors, or for Uppers by permission of the Instructor. Four prepared class periods, Fall term only, to help students with special interest in art or design prepare a portfolio for Advanced Placement. The course will concentrate on preparing work for the "breadth" category of the AP, but will also entail planning courses or projects to fulfill the sections entitled "quality" and "depth." A student enrolled in this course should plan to take at least one art course or project in Winter and Spring terms. (Ms. Spatz-Rabinowitz)

The Classics

The foreign language diploma requirement is competence at the third-year level of a modern or ancient language. Such competence in Latin or Greek is usually established by completing the ninth trimester. Able students may fulfill the requirement at the end of the eighth, or even the seventh trimester, by passing a special examination set by the department.

Two sequences are offered in Latin, the regular sequence of *Latin 10, 20, 30, 40*, and *50*, and an accelerated sequence of *Latin 10, 25, 35*, and *50*. In Greek the regular sequence is *Greek 10, 20, 30*, and *40*, though Upper Middlers wishing to accelerate may want to consider *Greek 10-20* followed by *Greek 30*.

Through the study of Greek and Latin the Depart-

ment of Classics offers students a direct entry into Greek literature, which is still unsurpassed in excellence, and into Latin, which, as the universal language of church, court, and scholars throughout the formative years of modern Europe, can rightly be termed the mother tongue of Western Civilization, and the surest index to its meaning.

Students have traditionally studied Latin before going on to the study of Greek. However, Greek is equally appropriate as a first language since it is not more difficult than Latin. The Greek alphabet is easily mastered in the first few class meetings, and students quickly discover that the Greek language has poetic and expressive qualities which stimulate the imagination and illuminate man's political and intellectual development.

In addition to language courses, there are survey courses which require no knowledge of Greek and Latin. Through them the Department makes available to all Andover students a broad introduction to Classical civilization: history, literature, mythology, epic, and etymology.

GREEK COURSES

10—0 Greek, First Level

(5010) Five prepared class periods. The course introduces the student directly to the Classical Greek of Periclean Athens through a series of readings which present not only the vocabulary, forms and syntax of the language but also the thoughts, feelings and actions that exemplify the Greek genius. Though preliminary selections are necessarily simplified, within the first year students are reading excerpts from Plato, Aristophanes, Euripides and Homer. The text is *Reading Greek* (Cambridge), by the Joint Association of Classical Teachers.

10-20—0 Greek, First and Second Level, Accelerated

(5020) Five prepared class periods. The course is open to Seniors and Uppers. It covers in one year the essential material of *Greek 10* and *Greek 20*: basic forms and structure, along with ample selected readings from Xenophon and Plato, as an introduction to Greek literature. The text is Chase and Phillips' *A New Introduction to Greek* (Harvard University Press).

13—1 Introduction to Greek

(5031) Four prepared class periods. The course is for students whose curiosity for the Greek language and literature has been aroused by their studies in other areas. For students who plan

some day to study Russian or German, this course provides an excellent introduction into the intricacies of a highly inflected language. The student is also treated to an inside preview of a literature which, over the centuries, has provided inspiration and models for the literature of the Western World. It is a term-contained course, but students wishing to continue with Greek will have the opportunity to do so.

20—0 Greek, Second Level

(5040) Five prepared class periods. The course continues the format of *Greek 10*, with further systematic development of reading skills and control of vocabulary, forms and syntax through the medium of more advanced selections from the Greek masterpieces, always with the purpose of understanding the spirit of the people that produced them. The text is the second in the *Reading Greek* series by the Joint Association of Classical Teachers.

30—0 Greek: Iliad and Odyssey

(5050) Four prepared class periods. Selected books of the *Iliad* and the *Odyssey*, and sometimes a play of Euripides. Students examine the nature of tragedy, heroism, and self discovery. The texts are Benner's *Selections from Homer's Iliad* (Naiburg), and Homer's *Odyssey* I-XII, ed. Stanford (St. Martin's Press).

40—123 Greek: Historians, Tragedians, Lyric Poets

(5061) Four prepared class periods. In the Fall Term ancient concepts of justice and morality are examined through the works of Herodotus and Thucydides. Human tragedy is explored in a play of Sophocles or Euripides in the Winter Term. The Spring Term is devoted to the study of emotion and self-expression in the Greek lyric poets. The texts are Chase and Phillips' *A New Greek Reader* (Harvard University Press), Euripides' *Medea*, ed. Elliott (Oxford), Sophocles' *Oedipus Tyrannus*, ed. Jebb (Cambridge), and Campbell's *Greek Lyric Poetry* (St. Martin's Press).

LATIN COURSES

10—0 Latin, First Level

(5110) Five prepared class periods. The purpose of the course is to prepare students for general reading in Latin. To that end, thorough training is given in the basic vocabulary, forms and syntax of the language (including all participles, infinitives and subjunctives) along with practice in sight reading. Frequent attention is paid to the relationship of Latin to English. Surveys of Roman history and civilization provide an introduction to "the grandeur that was Rome".

10-20—0 Latin, First and Second Level, Accelerated
 (5120) Five prepared class periods. For Upper Mid-
 dlers and Seniors. A year-long accelerated intro-
 ductory course covering the essential elements of *Latin 10*
 and *Latin 20*.

13—1 Introduction to Latin
 (5141) Four prepared class periods. The course is for
 13—2 students seeking an introduction to the Latin
 (5142) language, or those whose studies in other lan-
 guages (including English) have aroused their
 curiosity about the workings of languages (grammar, syntax
 and vocabulary). It offers special profit and fascination to
 students of French, Spanish, and Italian, since it illuminates
 much of what they already know by acquainting them with
 the mother language. For students who plan some day to
 study Russian or German it serves as an introduction to the
 workings of highly inflected languages. It is a term-
 contained course, but students wishing to continue with
 Latin will have the opportunity to do so.

20—0 Latin, Second Level: Selected Prose Authors
 (5150) Five prepared class periods. During the first
 term, the course gives a thorough review of the
 fundamentals of Latin grammar and begins the reading of
 Caesar. Caesar's account of his campaigns gives the student
 insight into the problems of political ambition and interna-
 tional intrigue. The character values to which the Romans
 attributed their success are examined in readings from
 Nepos and Livy on the lives ancient heroes. New students
 whose first-year Latin course has been less complete than
Latin 10 may be placed by the Department Chairman in a
 special section of *Latin 20* appropriate to their needs.

25—0 Latin, Accelerated Second Level
 (5160) Five prepared class periods. Open to students
 who have completed *Latin 10* with high honors
 and to other qualified students, at the invitation of the De-
 partment. After a thorough grammar review in the fall, the
 course moves through selections from Caesar in the winter
 and into Cicero by spring, with a sampling of the poetry of
 Ovid as time permits. There is practice in sight translation
 and prose composition. Texts are essentially the same as for
Latin 20 and *Latin 30*. Successful completion of *Latin 25* en-
 ables one to enter *Latin 35* the next fall.

30—0 Latin, Third Level: Cicero, Sallust, Vergil
 (5170) Four prepared class periods. Through the writ-
 ings of Cicero and a variety of other authors,
 students learn to read Latin prose with increasing ease. The
 course presents a picture of Cicero's life and times and com-
 pares the political unrest and maneuvering of his time with

that of our own. The literary importance of Cicero as the
 creator of a prose style which had a dominant influence on
 the literature of Europe for centuries is assessed. In the
 Spring Trimester the student is introduced to Roman poetry
 through readings in Vergil's *Aeneid*, Book II. The student will
 begin to understand how Vergil, as heir to the Homeric
 tradition, gave to epic and to Western poetry in the genera-
 tions that followed him their definitive form. The text is
 Gillingham and Barrett's *Latin: Our Living Heritage, Book III*
 (Charles Merrill Books). New students whose first- and
 second-year Latin courses have been less complete than *Latin*
10 and *Latin 20* may be placed by the Department Chairman
 in a special section of *Latin 30* appropriate to their needs, or in
Latin 25.

35—0 Latin, Accelerated Third Level
 (5180) Five prepared class periods. Open to students
 who have successfully completed *Latin 25* and
 to other qualified students at the invitation of the Depart-
 ment Chairman. The course reads extensively in Vergil's
Aeneid (Books I, II, IV and VI), covering most of the Spring
 Trimester's reading in *Latin 30* and the year's reading in *Latin*
40. The student thereby gains credit for the fourth-year level
 and is eligible both to take the Latin Advanced Placement
 Examination, Level IV, in the spring and to enroll in *Latin 50*
 the next fall.

40—123 Vergil's Aeneid
 (5191) Four prepared class periods. Through a thought-
 (5192) ful reading of Vergil's *Aeneid*, students are intro-
 (5193) duced to the great classical traditions of epic
 poetry. The literary form and beautiful, sym-
 bolic content of the *Aeneid* become familiar as the model and
 inspiration of our western poetical heritage. Homer, as Ver-
 gil's well-loved and frequently emulated model, is read in
 translation; the comparison and contrast of the Homeric
 tradition with Vergil provide a clear understanding of the
 Latin author's techniques and purpose. Students electing
Latin 40 all three trimesters will be well prepared to take the
 Latin Advanced Placement Examination, Level IV, in the
 spring.

50—123 Livy and Tacitus; Roman Comedy; Horace and
Catullus
 (5201) Four prepared class periods, one unprepared
 (5202) period devoted to sight work. The course in-
 (5203) cludes preparation for the Latin Advanced
 Placement Examination, Level V. In the Fall Term, selections
 from Livy's *Histories* give students insight into the founda-
 tions of some of the Western World's ideas of government
 and law. Selections from Tacitus' *Annals* are read as a con-
 trast because of their studied depiction of human excess in

tyranny and degradation. In the Winter Term, Roman comedy treats students to the bases of European high comedy and farce. In the Spring Term, the students begin to understand the Roman concepts of moderation versus excess through the writings of the poet Horace, described by a Twentieth Century psychiatrist as "a type of the perfectly integrated personality." The lyric poetry of Catullus reveals the perennial personal emotions found as well in the First Century BC as now.

CLASSICS COURSES

21—1 Classical Civilization: Greece

(5321) Four prepared class periods. For Juniors and

21—3 Lower Middlers. The course surveys the

(5323) achievements of the ancient Greeks from

Homeric times through Alexander the Great, including their impact on later civilizations in such areas as literature, art, philosophy, drama, government and science. The case-study method is employed to enhance skills of analysis, discussion and presenting ideas on paper, and to focus the material on two comprehensive themes: the search for a single unifying explanation of the physical universe, and the conflict between ideal justice and law-court verdicts.

22—2 Classical Civilization: Rome

(5332) Four prepared class periods. For Juniors and

Lower Middlers. The course introduces students to the civilization of Rome which dominated the Western World politically for a thousand years and culturally for even longer. The developing concepts of politics, law, and empire as we know them today are discussed. The course challenges the students to consider the meaning of the Roman experience in its glorious achievement of the "Roman Peace" as well as in its "Decline and Fall."

For other courses related to Classics, please see:

Under History: Ancient History (History 330); Under Interdisciplinary: Mythology; Etymology; Greek Literature in Translation; Roman Literature in Translation.

English

The diploma requirements in English are to establish competence in writing and reading (normally by successful completion of the *Competence Course*), and to complete the *Literature Sequence* through *Literature C*. For those entering Seniors and Post-Graduates who must take *English 300*, the requirement is reduced by the appropriate number of trimesters. (Seniors and Post-Graduates are interviewed by the Department Chairman before the start of school and in some cases these students may be exempted from *English 300* to enroll in one of the 400 or 500 level English courses.) All new Lovers and Uppers enroll in *Competence*. Students entering the Junior Class are strongly urged to take the normal Junior course, *English 10*, although they may elect to take no English at all. Juniors may not enroll in *Competence*.

The English Department also offers courses at the following levels: *Language Skills* and *Efficient Reading* for students lacking certain English skills; specialized courses for students who have already passed their competence and literature requirements and elect to continue studying English. Related courses, whose prerequisites vary, are listed elsewhere in this booklet: e.g., under Performing Arts, Interdisciplinary Courses, Classics Courses, and Modern Foreign Language Courses in translation. All English courses meet for four prepared classes a week, unless the course description states otherwise.

10—0 English

(1100) This course is recommended for all Juniors. As a foundation for the *Literature Sequence*, the course studies a variety of literary forms and styles. Frequent writing assignments, close reading of such texts as *The Odyssey*, *Great Expectations*, the *Tempest*, and regular work with journal entries prepare the student for the *Competence* course in the tenth grade.

16—23 Language Skills

(1162) This course is designed for those students, primarily Juniors, who need supplementary help in overcoming weaknesses in writing, spelling and vocabulary. Specific assignments are geared to the needs of each student. Open only to students who have permission of the instructor. (Ms. Brown).

Juniors are also eligible to enroll in *Etymology*, which is described under *Interdisciplinary*.

17—3 Language Skills

(1173) Seniors and Uppers who need help in writing essays and research papers may elect this course for the Spring Term only. Organizational skills, paragraph and sentence structure, and theme development will be reviewed depending on students' individual needs. Students must have permission of the instructor. (Ms. Brown).

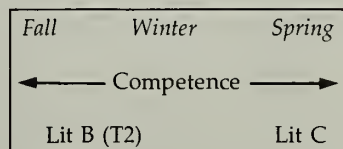
18—1 Efficient Reading

(1181) Recommended for Upper Middlers and
 18—2 Seniors, this course is designed to teach
 (1182) strategies for increasing reading efficiency and
 18—3 comprehension. It places particular emphasis
 (1183) on techniques for reading textbooks and novels,
 vocabulary development, and the improvement
 of comprehension through analysis of assigned readings.
 (Ms. Brother).

Normal Required Sequence (2 years)

First year of sequence

Second year



(1200) Competence Course

The course is designed to teach basic skills in reading and writing. It enables a student to achieve the competence requisite for the literature sequence and the specialized courses. The course is concerned with the recognition and use of the basic elements of a sentence, sentence patterns, punctuation, paragraph development and coherence, and the composition of unified exposition. The first term emphasizes writing paragraphs and short compositions; the second term includes multi-paragraph compositions and the documented report. The third term focuses on close and accurate reading of the short story and the poem and helps students develop the skill necessary to write about these works clearly and concisely. *Competence* also encourages the acquisition of important reading skills in conjunction with the study of writing. Passages composed by skillful writers are evaluated for organization, logic, point of view, tone, diction, transitional devices. Through the use of the summary sentence, the outline, and the summary paragraph, a student learns to reduce a passage to core ideas. Texts: *English Competence Handbook*; *Prose Models*, ed. Levin; *The Modern Tradition*, ed. Howard; *Poetry*, ed. Proffitt.

LITERATURE SEQUENCE

Lit B (T2) (a two-term commitment)

Lit B continues the shift in emphasis, begun in the third term of *Competence*, away from basic writing training to reading and writing about literature. Here students will choose a course centered in one of three modes: Comic, Tragic, or Mythic. Though the modes differ, the objectives of *Lit B* are common to all three: to develop the skills of literary analysis; to teach a sense of literary mode; develop a sense of historical perspective; teach the forms of the novel, the poem, the play; develop a literary sensibility; and apply analytical skills to the writing of papers.

(1224) Lit B—1 (The Comic View)

A study of verse and prose works that illustrate the nature, purposes and techniques of comic writings. Core Texts of 1981-82:

FALL TERM —*Hard Times*

Joseph Andrews

Everyman in His Humor

Poems by metaphysical poets, Donne to Marvell

WINTER TERM —*Huckleberry Finn*

Selected works by Swift, Carroll, Cummings and other modern writers.

The Canterbury Tales, the prologue and a number of the Tales.

(1234) Lit B—II (The Tragic View)

This course examines the form and content of a number of works in order to identify and define elements of tragedy that are fundamental to them. The works are arranged in approximate chronological order with a balance being sought in each term among the various genres. Techniques of literary analysis and critical appraisals of the reading are stressed in frequent written assignments. Core Texts:

FALL TERM —*Oedipus Rex*

Wuthering Heights

Selected Poetry

Selected Plays by Ibsen

WINTER TERM —A Novel by Thomas Hardy

Heart of Darkness

A work by Toni Morrison

Selected Poetry

(1244) Lit B—III (The Mythic View)

The course explores mythic elements in a wide variety of works with the aim of developing a student's ability to respond to and write about literature. Core Texts:

FALL TERM —*The Bible* (selections)
The Odyssey
Agamemnon
 Selected Poetry

WINTER TERM —*Moby Dick*
Invisible Man
 Selected Poetry

(1263) **Lit C**

An introduction to the study of Shakespeare. At least three plays will be read, one being *Hamlet*, with an emphasis upon close textual analysis.

SPECIALIZED COURSES

Specialized Courses are open to students who have successfully completed *Competence, Literature B* and *C*. Courses numbered in the 500s are more intensive and demanding than those numbered in the 300s and 400s. Each course has four prepared class periods a week, unless specifically stated otherwise. Only courses with sufficient enrollment will be given.

300—12 English

(1301) A special course for all post-graduates and one-year Seniors. Its purpose is to provide the writing and reading skills taught in *Competence* as well as to expose students to substantial works of literature. While reading plays, poetry, short stories, or novels, students undertake intensive writing exercises and learn to write effective papers of greater length. (Mr. Bernieri, Mr. Owen, Mr. Stephens)

401—123 Non-Fiction Writing

(1711) In this course writers will gain practice in these
 (1712) non-fiction modes: personal essay, analysis,
 (1713) argument, feature writing, and extended composition. There are daily writing assignments; class work focuses on student editing. The instructors assume that students entering the course write with grammatical and rhetorical competence. Students are encouraged to submit their work for publication in newspapers and magazines. (Mr. Pepper)

403—123 Introduction to Writing

(1731) An introductory course to the writing of original
 (1732) stories, informal essays, and poetry. While examining examples of the genres mentioned, the student tries all these forms. With written permission from the department chairman, a student may take

this course before he has completed the normal Competence-Literature sequence. (Mr. Owen, Ms. Monsky).

404—1 Hemingway and Fitzgerald

(1741) A consideration of two modern literary contemporaries who captured their eras with equal success, but whose prose styles and temperaments made them unlikely compatriots. Short stories

and novels by both authors will be read. In addition, T.S. Eliot's *The Waste Land*, and the work of one other important writer of that time like Dos Passos or Cummings is used as comparative study. (Mr. Bernieri, Mr. Stephens)

405—123 Afro-American Literature

(1751) A survey of major Afro-American literary texts from the late nineteenth century to the present.
 (1752) Works by Dunbar, Hughes, Wright, Baldwin, Ellison, Reed, Morrison and others are closely analyzed and placed in historical context. Each student completes the trimester's work with a project focused on a specific artist, work or historical event. (Mr. Bernieri)

408—123 American Writers

(1781) A thematic and comparative study of the novel
 (1782) and drama in America from 1850 to the present.
 (1783) Representative authors are Hawthorne, James, Wolfe, O'Neill, Fitzgerald, Dos Passos, Hemingway, Williams, Faulkner, West, Styron, Agee, Cather, Wharton, Anderson, Steinbeck. (Ms. Harper, Mr. Cobb, Mr. Bardo, Ms. Thomas.)

500—23 James Joyce

(1802) The first term is devoted to *Dubliners*, *A Portrait of the Artist*, and *Stephen Hero*, and Ellmann's *James Joyce*; the second to *Ulysses* and *Finnegans Wake* in part. The purpose of the course is to follow the development of Joyce's method and style and to develop the skill to read important and difficult works without the aid of study guides and other secondary material beyond the Ellmann. Although the course may be taken in either term, the student gains a better sense of Joyce's genius by enrolling for two terms. (Mr. Owen)

502—12 Irish Literature

(1821) The course will begin with a brief examination
 (1822) of Irish history and Celtic mythology in order to broaden our appreciation and understanding of the four major writers of the Irish Renaissance: Yeats, Joyce, Synge, and O'Casey. Throughout the term we will try to draw connections between Irish politics and literature, both during the Literary Revival and today, in Northern Ireland, where "the troubles" persist. (Ms. Bussiere)

504—123 Man and God

- (1841) The course considers man's search for meaning
 (1842) in what frequently seems to be an inexplicable
 (1843) world. Readings include: *King Lear*,
 Shakespeare; *As I Lay Dying*, Faulkner; *Long*

Day's Journey into Night, O'Neill; J.B., MacLeish; *The Fixer*, Malamud; *Crime and Punishment*, Dostoevski; *The Trial*, Kafka; *Wise Blood*, O'Connor; *Nine Stories*, Salinger; *The Birthday Party*, Pinter; *The Cocktail Party*, Eliot; *Zorba the Greek*, Kazantzakis; *The Bluest Eye*, Morrison. (Miss St. Pierre)

508—23 Directions in 20th Century Drama

- (1882) The close study of significant contemporary
 (1883) drama. The winter term focuses on the first half
 of the 20th Century — plays by Shaw, Chekov,

Strindberg, O'Casey, Brecht, Pirandello, and Ionesco; the spring term starts with Beckett, and includes plays by Williams, Bolt, Pinter, Albee, Stoppard, and Shepard. (Ms. Braverman, Mr. Owen)

509—1 Shakespeare: The Man, The Times, The Theatre, The Plays

- 509—3 The course focuses on six plays (representative
 (1893) histories, tragedies, and comedies), the sonnets, as well as some biographical and historical

readings. (Mr. Stableford)

510—123 The Short Novel

- (1901) An examination of the novella, and the genre of
 (1902) the short story with concentration on some fifteen works of comparative literature, including,
 (1903) Chekov's *Ward No. 6*; Mann's *Death In Venice*;

Lawrence's *The Fox*; Tolstoy's *The Kreutzer Sonata*; James' *The Beast in the Jungle*; Stendhal's *The Cenci*; Greene's *The Third Man*; Melville's *Billy Budd*; Stevenson's *Dr. Jekyll and Mr. Hyde*. (Dr. Theroux)

512—123 Satire and Comedy

- (1921) A study of both the theories and practice of
 (1922) satire and comedy, with emphases on the eighteenth century and the modern period. Works
 (1923) by authors like Pope, Swift, Sterne, Ben Jonson,

Waugh, and Heller will be studied in conjunction with the visual art of Hogarth and Steinberg, and recordings of modern performers like Peter Cook, Dudley Moore, Mel Brooks, and Peter Sellers. (Mr. Regan)

513—123 Novel & Drama Seminar

- (1931) The course concentrates on major works of literature since 1880, primarily on the works of Virginia Woolf, Henry James, David Storey, Franz Kafka, Flannery O'Connor, T.S. Eliot, Samuel

Beckett, Eugene O'Neill, William Faulkner, Gunter Grass, Saul Bellow, Gabriel Garcia Marquez, Grace Paley, John Barth, Isaac Bashevis Singer, Robert Stone, Elie Weisel, Harold Pinter, Bertolt Brecht, and Vladimir Nabokov. Students study the "world" of each writer and compare it with that of the others. As a basis for the comparison with the classics of the past, they also study a Greek Tragedy and *The Brothers Karamazov*. Class periods are devoted to seminar discussions (often led by students) and critiques of student writing. Students regularly stage dramatic readings, cast and performed by the class. (Mr. Wise)

514—123 Creative Writing

- (1941) A writing course in poetry, short fiction and
 (1942) drama. Content and emphasis shall be determined by each instructor. Fall: Introduction to
 (1943) creative forms; Winter: Poetry, Short Fiction;

Spring: Poetry, Short Fiction, Drama. (Mr. Lopes, Mr. Smith)

515—123 Literature of the Quest

- (1951) Four prepared class periods. Open to Seniors.
 (1952) Focusing on the ancient pattern of the journey, the thresholds crossed and the vision obtained,
 (1953) the course asks students to interpret elements of

the quest from a variety of perspectives. In the Fall Term readings include Socrates' *Euthyphro*, *Oedipus Rex*, the Abraham cycle, Beckett's *Waiting for Godot*, and Eliot's *The Waste Land*. The Winter Term considers the suffering encountered on the quest and explores themes from the gospel of Mark, *King Lear*, *The Great Gatsby*, Wiesel's *Night*, West's *Miss Lonelyhearts* and Flannery O'Connor's *Everything That Rises Must Converge*. The Spring Term questions the journey's end, reading the Amor and Psyche myth and *Alice in Wonderland*, comparing Jacob and Jesus and ending with two tragicomedies: *The Tempest* and *Who's Afraid of Virginia Woolf?* (Mr. Zaeder)

518—3 Spenser and Milton

- (1963) Students read minor works of both authors as well as Spenser's *The Faerie Queene* (Books I-II) and Milton's *Paradise Lost*. (Mr. Kalkstein)

520—123 Images of Woman

- (1971) This course will examine, through the study of
 (1972) literature, woman as she perceives herself and as she is perceived by others. It will explore
 (1973) works by both men and women writers and will

focus on the constant and the changing image of woman in different literary periods. Readings will include: *Northanger Abbey*, Austen; *Jane Eyre*, Bronte; *Hedda Gabler*, Ibsen; *Measure for Measure*, Shakespeare; *The French Lieutenant's Woman*, Fowles; *The Awakening*, Chopin, *The Mill on the Floss*, Eliot;

The Scarlet Letter, Hawthorne; *Surfacing*, Atwood; *A Room of One's Own*, Woolf; *Diving Into The Wreck*, Rich; *Song of Solomon*, Morrison. *Tell Me a Riddle*, Olsen; *As I Lay Dying*, Faulkner. (Ms. Harper, Ms. Braverman, Ms. Dobson)

527—3 Chaucer and His Age

(1983) The sophisticated ingenuousness of the Middle Ages, as seen in works by two of its greatest practitioners, Chaucer and the *Gawain*-poet. The focus of the course is a study of *The Canterbury Tales* in Middle English. *Sir Gawain and the Green Knight* will be read in translation. (Mr. Wilkin)

528—2 Wit and Poetry in the Seventeenth Century

(1992) A study of the several types of concentrated, witty poetry that dominated the early seventeenth century—the work of Donne, Jonson, Herbert, and Marvell—and of the profound effect that these poets have had on later poets like Hopkins and Eliot. Although the focus of the course is poetry, some of the background material is prose, from Elizabethan sources to the modern literary critics. (Mr. Zaeder)

The following Theatre courses, which are related to English studies, have no prerequisites: Theatre 22 (Public Speaking), Theatre 28 (Shakespearean Workshop), and Theatre 53 (Playwriting). These may be found under Performing Arts. Other courses related to English are Art 311 (Contemporary Communications) and a number of literature in translation courses in the Interdisciplinary section.

History and the Social Sciences

The diploma requirement for history in 1982-83 will be successful completion of United States History (*History 300 (T2)* and *301*) plus one trimester of another *300* or a *400* level history/social science.

The History Qualifying Test (H.Q.T.) will be given to all Lower Middlers in the Spring of 1982 and to all entering Upper Middlers, Seniors, Post-Graduates and foreign students during the orientation period in September 1982. The purpose of the test is to place students in the appropriate level of history study. (1) For some, the test results will indicate the student is to

take *History 250* in the Fall or Spring terms of 1982-83 and begin the three-term sequence of *History 300 (T2)* and *301* in January 1983 or September 1983. Such a program satisfies the four-term requirement. (2) For some students the test results will indicate the student is ready to begin *History 300 (T2)* and *301* in September 1982. The student may choose to begin in September 1983. Such a student would also need another *300* or *400* level course. The student *may only* take the *300* or *400* level course after having completed one term of the three-term *300 (T2)*, *301* sequence. We *recommend* that the student take a *300* level course in order to "branch out" and study non-United States History. *History 300 (T2)* and *301* and another term at the *300* or *400* level satisfies the diploma requirement. (3) The results on the H.Q.T. will determine whether students who have had a U.S. History course in the 11th or 12th grade at their previous school should take a term of *History 250* or a term of history at the *300* or *400* level to complete the diploma requirement.

One of the courses offered for Juniors and Lower Middlers — *The Emergence of Man* — is designed to introduce the students to a culture different from their own. A second — *Early American Society* — stresses historical topics other than politics prior to the Revolutionary period.

The History Department *recommends* that during the Lower Middle year each student should take one term of biographical study. The selection should be made from *History 200*, *210*, and *220*. The Department believes that study in one of these courses will not only give the student an introduction to history through the study of great men and women but will also enable him to acquire certain fundamental skills in preparation for upper-level history and social science courses. The Department will emphasize various skills in reading, note-taking, the definition of historical and social science terms, the use of evidence, and the writing of historical essays.

The courses in history offered to Upper Middlers and Seniors are based on the conviction that a knowledge of the past is essential if an individual is to function effectively as a citizen in a modern democracy.

In 1982-83 any course above 300/301 will satisfy the fourth trimester for the diploma requirement.

The courses at the *300* level are thought of as "surveys", introductions, either to non-United States areas

of the world (e.g., Latin America), or to historical periods different from the life span of the United States (e.g., the Middle Ages), or to social science disciplines other than history (e.g., Economics). The courses at the 400 level in 1982-83 will be offered under the same titles and with the same expectations as in the last few years. In 1983-84, these courses will be "seminars" with specified prerequisites; in 1983-84 the fourth trimester *must* be selected from the 300 level courses. The 400 level seminar electives will be issue-oriented trimester courses and will use both historical and social science concepts and skills. To insure effective discussion the seminars will be limited to 12 students; each seminar will meet 3 times a week; and there will be a greater expectation of independent reading and writing.

The number in parentheses following each course title is the number that the course has in the 1981-82 Course of Study, and is included here for reference.

COURSES IN THE SOCIAL SCIENCES

100—1 Anthropology: The Emergence of Man (10)

(2701) Four prepared class periods. Primarily for Juniors. This course concerns itself with the origins and nature of humanness, tracing those developments which make Man the unique animal he is. Among the specific topics covered during the term will be primate behavior, the evolution of culture and language, toolmaking, and contemporary hunter-gatherer societies. Emphasis will be placed on both anthropological and archaeological techniques, as well as on reading and writing skills. In addition to readings, use will be made of films and filmstrips, and students will become familiar with fossil casts and artifacts, through the resources of the Peabody Museum of Archaeology.

100—2 Anthropology: The Emergence of Society (10)

(2702) Four prepared class periods. Primarily for Juniors. This course traces the development of human society from the primitive Cro-Magnon bands of the Upper Pleistocene through the early river-valley civilizations of the Near East and equivalent New World advances. Specific topics covered during the term will include the origins of food-production, the growth of villages and cities, the advent of writing, the meaning of civilization, the state and the citizen. Emphasis will be placed on both anthropological and archaeological techniques, as well as on reading and writing skills. In addition to readings, use will be made of films and

filmstrips, and students will become familiar with artifacts, through the resources of the Peabody Museum of Archaeology.

Each of the above courses may be taken separately, but students whose schedules permit should consider taking them as a sequence, in order to obtain a full understanding of the early development of human beings and society.

HISTORY COURSES

100—1 Early American Society (10)

(2001) Four prepared periods. For Juniors and Lower Middlers. A topical survey of pre-revolutionary American society, the course is designed to acquaint students with skills in historical exposition. Topics include the family, slavery, commerce and farming, religion and the arts. (Mr.

Crawford, Mr. Lyons)

200—1 European Biography I (20)

(2101) Four prepared class periods. Open to Lower Middlers and selected Juniors. The course deals with the lives of men and women in Europe from the Middle Ages to the eighteenth century. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, and biographers' methodologies are all components of this study. Course materials include selected biographies in paperbacks: Eileen Power, *Medieval People*; Conyers Read, *The Tudors*; Robert Heilbroner, *The Wordly Philosophers*. (The Department)

210—3 European Biography II

(2113) Four prepared class periods. Open to Lower Middlers and selected Juniors. This course looks at the lives of both heroic and average men and women in the Europe of the 19th and early 20th century. Biography is used as an historical tool to study the qualities and characteristics of leadership and of a century. Each individual is set in his historical and national context. Biographies read may include Napoleon, Bismarck, Queen Victoria. (The Department)

220—2 American Biography (22)

(2122) Four prepared class periods. For Lower Middlers and a limited number of Juniors. As a comparative study of American leaders, the course deals with the lives of men and women who made significant

contributions in several fields of endeavor. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, contemporary American eras, and biographers' methodologies are all components of this study. Course materials include selected biographies in paperbacks: *The Autobiography of Frederick Lewis Douglass*; Lois Banner, *Elizabeth Cady Stanton*; Ester Forbes, *Paul Revere and the World He Lived In*. (The Department)

250—1 American Biography for Uppers (21)

(2151) Four prepared class periods. For Uppers whose

250—3 H.Q.T. scores require a term of preliminary history study prior to *History 300 (T2)* and *301*. The primary difference between *History 250* and the

other *History 200s* is that the readings in *250* are geared to older students and the subject matter is more explicitly related to preparation for *History 300 (T2)* and *301*. As a comparative study of American leaders, the course deals with the lives of men and women who made significant contributions in several fields of endeavor. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, contemporary American eras, and biographers' methodologies are all components of this study. Course materials include several biographies in paperbacks: Charles W. Akers, *Abigail Adams, An American Woman*; Saul K. Padover, *Jefferson*; Robert V. Remini, *Andrew Jackson*. (The Department)

300—12 The United States (T2) (a two-term commitment) (35)

300—23 Four prepared class periods. For Upper Mid-
(2205) dlers and Seniors. This course, along with *History 301* and *History 250* or a *300* or *400* level

history or social science course, according to placement on the H.Q.T., fulfills the four term history diploma requirement. History at the *200* level taken as a Lower does *not* count as one of the four term diploma requirements. The first term emphasizes three goals—a survey knowledge of American history through Reconstruction by reading a text, John A. Garraty's *The American Nation*; the acquisition of skills by daily exercises in reading, note-taking, and writing; and an in-depth study of American federalism through intensive focused readings and writing. The second term emphasizes American Industrialization from the post Civil War years to 1940. The threefold goals of the first term, a survey knowledge, skills, and analytical mastery of an organizing theme,

continue; but the variety of readings and writings and the complexity of the materials increases. (The Department)

301—1 The United States (36)

(2211) Four prepared class periods. For Upper Mid-
301—3 dlers and Seniors. The focus is on twentieth
(2213) century America to the present, with an emphasis on American foreign policy. In this term

the writing of a research paper represents a major part of the work. **Prerequisite:** successful completion of *History 300 (T2)*. In the fall of 1982 the Washington Interns of the spring of 1982 will take *History 301-1* with Ms. Dalton.

302—12 American History for Foreign Students (34)

(2221) Four prepared class periods. A course for students for whom English is a second language
(2222) and whose H.Q.T. scores indicate they are not

ready for *History 300 (T2)* and *301*. The course will emphasize language skills important to the study of American History, and the subject matter will focus on the founding of the republic, constitution building and how the American Government works, the westward movement, the Civil War and the coming of urban-industrial, multiethnic America. The intention of the course is to recognize the special needs of the students and to bring them to a level of achievement so they may transfer to the *300/301* sequence in the winter or spring term, if the students wish to be candidates for the diploma. (Mrs. Lloyd)

A student must have completed one trimester of History 300 or have credit for U.S. History from another school before enrolling in a 300 or 400 level course.

Survey Courses — 300s

The department *recommends* that all students take a *300* level course to complete the fourth trimester diploma requirement, *but in 1982-83 any 300 or 400 level course will fulfill the diploma requirement*. The courses at the *300* level are thought of as "surveys," *introductions*, either to non-United States areas of the world, or to historical periods different from the life span of the United States, or to social science disciplines other than history.

COURSES IN THE SOCIAL SCIENCES

310—1 Introduction to Economics (437)

(2811) Four prepared periods. For Seniors who have

310—3 completed *History 300 (T2)* or the equivalent.

(2813) This course is an introduction to methods of economic analysis and their application to problems which confront this country and the world. Students

will examine the historical origins of economics, the underlying assumptions, and the principal critiques. (Ms. Amster)

320—2 Food and Hunger in Developing Countries

(2822) Four prepared class periods or the equivalent.

320—3 Students in this interdisciplinary course will examine the extent and the causes of world hunger through selective reading, data analysis and interpretation, and discussion. What is hunger? What are the interconnections between food supply and population, climate, trade, food aid policies, development, land use patterns, and agricultural methods? What can be done to improve the world food situation? We will examine these questions from different analytical perspectives—historical, economic, political, geographic, cultural, biological, and ethical—and through country case studies. Each student will write and make an oral presentation of a case study of hunger in a particular country. (Mrs. Goetze, Dr. Avery, Dr. McNemar)

(2833)

HISTORY COURSES

330—123 Ancient History (410)

(2301) Four prepared class periods. For Upper Middlers and Seniors. The course is concerned with

(2302) Greek and Roman history from the Minoan

(2303) Period to the beginning of the Medieval Period.

Each term represents a coherent and independent unit. In the Fall Term the survey ends with the world empire of Alexander the Great. The Winter Term covers the period from the beginning of Rome until its transition from Republic to Empire. The Spring Term is concerned with Roman Empire and the transition from Roman to Medieval History. (Mr. Krumpe)

332—2 Social History of the Middle Ages (412)

(2322) Four prepared class periods. For Upper Middlers and Seniors. The course starts with the

reshaping of Roman laws and customs by the rapidly emerging Christian doctrine; these in turn are changed by the invasions of the Germanic peoples. Charlemagne serves as the prime illustration of this medieval combination of attitudes. As Europe moved into the Renaissance, humanism and rationalism dignified woman as the 'Lady' of courtly love; at the same time the fear of woman as the 'witch' haunted Europe. (Mrs. Clark)

334—0 Modern Europe: A Survey (420)

(2340) Four prepared class periods. Open to Upper Middlers and Seniors. The Fall term consists of a

background survey of the 16th, 17th, and 18th centuries, with particular emphasis on the political, economic, and

intellectual revolutions that helped to mold the modern world. The focus of the Winter Term is the period 1800-1900, with continuing attention given to the shaping of modern thought, the emergence of the nation-state, and the effects of industrialism. In the Spring Term, the course covers topics in 20th century Europe; the two World Wars, and their effect; the nature of totalitarianism; the cold war and the rise of the superpowers.

Reading is from primary and secondary sources, as well as fiction. Visual materials are used where appropriate. This course has proven to be a good preparation for the Advanced Placement Examination in European History. (Mr. Royce)

336—2 Tudor England (422)

(2362) Four prepared class periods. Primarily for

Seniors. The years when England was ruled by

the Tudor family were some of the most colorful and pivotal in English history. The focus is on Elizabeth I and her England, with a lesser emphasis on the earlier Tudors. Social and cultural conditions are studied, as well as political and economic conditions. Readings are taken from a variety of primary and secondary sources; writing exercises are an integral part of the course. (Ms. Minard)

337—1 Victorian England: England in an Age of

Expansion (424)

Four prepared class periods. For Upper Middlers and Seniors. The course is devoted to a study of the major movements and changes that challenged the British people from 1789 to 1901. It is divided into three periods: a study of the background of 1832, the early Victorians, and the late Victorians. The final eight weeks of the course are concerned with the last two periods. Since Victorian literature more directly influences the life and thought of the times than that of any other period of English history, the course examines closely those writers whose works were influential in adapting English minds and institutions to changing conditions. (Mr. Harrison)

338—12 Modern Russia: History and Literature (426)

(Not Offered 1982-83.)

This course, for Seniors only, examines the past 150 years of Russian history and culture in somewhat greater depth than is possible in the one-term course (*History 339*). Though either term may be taken alone, students are urged to treat it as a two-term commitment. The first term is devoted to Imperial Russian history and culture, with an examination both of Tsarist institutions and the growing revolutionary movement. The second term is devoted to Soviet Russia since 1917; the course concludes with a close look at the U.S.S.R. today and its prospects for the future.

Considerable attention is given to the study of literature.

From the days of Pushkin in the early 19th century, Russian writers have been viewed by the government with fear and suspicion. This is because, despite police harassment, and censorship, they have continued to write fearlessly about the most pressing issues of their times. As the course examines the significant events and ideas of modern Russian, it also examines the reflection of these events and ideas in the fiction and memoirs of such authors as (in the Fall Term) Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov, and Gorky, and (in the Winter Term) Mayakovsky, Zamiatin, Babel, Olesha, Solzhenitsyn, and writers of the contemporary underground press known as *samizdat*. (Mrs. Powell and Mr. Richards)

339—3 The Soviet Union (427) (Not Offered 1982-83.)

Four prepared class periods. Open to Upper Middlers and Seniors. After an initial examination of Russia's medieval and early modern background, the course focuses on the past hundred years of Russian history, with a careful study of the revolutionary changes which have transformed that country internally and created one of the great powers of the contemporary world. Although the general orientation is chronological, the course focuses on specific topics of particular significance: the tension between East and West; the rise of the intelligentsia; Lenin and the Bolshevik Party; the Stalinist totalitarian system; Soviet foreign policy; the contemporary Russian mind. Emphasis is placed on political affairs and especially the Revolution of 1917, but considerable attention is also given to economic, social, and cultural matters. Reading is from a wide variety of sources, both primary and secondary, and also works of fiction. Visual materials, principally films, are also used. (Mr. Richards)

See also Russian 13 in the Modern Foreign Language section.

340—1 Modern China (401)

(2401) Four prepared class periods. For Upper Mid-

340—3 (2403) After an introduction to traditional Chinese thought and institutions, the course will concentrate on events since 1800 in

China. There will be much emphasis on China's response to the West, on economic, intellectual and political developments during the nineteenth and twentieth centuries. Readings will be from philosophy, history and literature. The classes will include both lecture and discussion. (Mrs. Sizer)

342—2 Modern Japan (402)

(2422) Four prepared class periods. For Upper Middlers and Seniors. After an introduction to traditional thought and feudal social structure in Japan, the

course will move to a closer look at ideas, events and developments since 1800. An attempt will be made to understand the unique way in which Japan responded to the challenge of the West. Readings will be in historical texts, impressions of contemporary observers, sociological descriptions and literature, with a special effort to understand the outstanding features of Japanese culture, politics and economics through analysis and discussion. (Mrs. Sizer)

344—3 Africa and the World (406)

(2443) This course will focus on contemporary issues facing the new nations of Africa, based on an historical analysis of the emergence of Africa from the colonial period. Political and economic development of these countries, the relations between developed and developing states, the emergence of majority rule in Southern Africa, and the role of Africa in the United Nations will be studied. Readings will include analyses of the issues African nations confront in the modern world, novels about Africa, and speeches and articles by African statesmen. (Mr. McNemar)

346—2 The Middle East (407)

(2462) Four prepared class periods. For Upper Middlers and Seniors. Few if any regions of the world claim a more compelling interest than the Middle East. From its ancient site of half the earth's cultural antecedents, birthplace of three world religions, landbridge of three continents, eternal East-West corridor, and ceaseless crossroads of conquerors, pilgrims, and tradesmen, the Middle East derives a distinctive character of its own. This course traces the region's emergence from the decline and fall of the Ottoman Empire (the famous "sick man of Europe") to the present day with special attention to such matters as Middle Eastern oil and Arab-Israel relations. A term paper is part of the course's requirement. (Mr. Bunnell)

348—1 Latin American Studies (409)

(2481) Four prepared class periods. Open to Upper

348—2 (2482) Middlers and Seniors. This interdisciplinary course offered by the History and Spanish departments provides an analysis of Latin American

348—3 (2483) social and political structures through the study of their historical and cultural development. The course will study the relation of these structures to

United States policies. (Ms. Rodriguez)

Seminar Courses — 400s

The courses at the 400 level in 1982-1983 will be as offered in the same manner and with the same expectations as in the last few years. In 1983-1984 these courses will become "seminars" with specified prerequisites; in 1983-84 the *fourth trimester diploma require-*

ment must be selected from the 300 level courses. The 400 level seminar electives will be issue-oriented, trimester courses and will use both historical and social science concepts and skills. To insure effective discussion the seminars will be limited to 12 students; each seminar will meet 3 times a week; and there will be a greater expectation of independent reading and writing.

COURSES IN THE SOCIAL SCIENCES

410—2 The Modern American Presidency (430)

(2922) Four prepared class periods. For Seniors. This course explores the historical development and institutional structure of the American presidency. Presidential power, the executive's working relationship with the other branches of government, presidential personality and his popular appeal, and the historic growth of the "imperial presidency" are topics covered in this course. The course consists of class discussions, lectures, exams, and several papers. The readings are drawn from: Richard Neustadt, *Presidential Power*; James Barber, *Presidential Character*; Arthur M. Schlesinger, Jr., *The Imperial Presidency*; and J. Anthony Lukas, *Nightmare*. (Ms. Dalton)

415—12 American Race Relations and Sectionalism (438)

(2932) Four class periods. The course investigates how racial thoughts and feelings have developed in the United States, and shows how such attitudes have taken social and legal form. The first term analyzes the origins of colonial racism and then contrasts the consequent patterns of antebellum slavery in the South with antislavery movements (and racial discrimination) in the North, culminating in secession, war, and "reconstruction." The second term focuses first on the post-Reconstruction issues of sectional reconciliation and racial equality, and then examines the implications of segregation and migration on the nation's 20th-century consciousness, finishing with a review of the civil rights movement from *Brown v. Board* to Birmingham, Boston, and Bakke. Readings from Jordan, *The White Man's Burden*; Litwack, *North of Slavery*; Fredrickson, *The Black Image in the White Mind*; McPherson, *The Abolitionist Legacy*; Woodward, *The Strange Career of Jim Crow*; and from Frederick Douglass, Booker T. Washington, W.E.B. DuBois, William Faulkner, Richard Wright, Lillian Smith, Martin L. King, Jr., and Malcolm X. (Mr. Williams)

420—3 Urban Studies Institute (433)

(2943) Seniors and qualified Uppers who are not involved in year-long courses may elect for their entire spring course program to participate in a ten-week

exploration of the American city, including field work four mornings each week. Lawrence, Massachusetts, its history and its present shape, its people and their special problems and opportunities, will be the focus of study, but the context will be drawn through investigation of broad historical, social, and economic issues which affect most of urban America. Lawrence has always been an immigrant city, and one-third of Lawrence's public school students are now of Hispanic background. In addition to their academic course work, Phillips seniors will explore a central aspect of urban life by serving as tutors in an intensive English language training program for a group of these Lawrence children; the tutoring program, which will be designed by Institute students and staff, will use dramatization and one-to-one tutoring to strengthen the children's oral and literary skills. Knowledge of Spanish or familiarity with theatre will be useful, but not essential.

All students will take a course in Caribbean History (*History 348*) and a course in Urban History (*History 460*), as well as a core course introducing developmental psychology and ethnic studies in such a way as to inform and support the fieldwork project. Students will meet periodically in evening seminars with outside speakers.

Seven to ten Phillips Academy seniors will be selected by interview and special application. Seven to ten seniors from college preparatory courses in Lawrence and Andover high schools will be selected in the same way. Apply to Susan M. Lloyd by December 1, 1982, for information and application forms. In the fall of 1983 members of the Class of 1984 who took Urban Studies the previous spring, and who have taken *History 300 (T2)*, but not 301, will take 301.

425—1 International Relations: The Present Patterns (432)

(2952) Four prepared class periods. For Upper Middlers and Seniors. This is a course on the Cold War with emphasis upon the politics of the world's two superpowers, the United States and the Soviet Union: how they created the United Nations, the Cold War, the many alliances, the nuclear arms race, and the numerous confrontations between themselves and their respective allies; how, too, they prompted the formation of the Third World and repeatedly intervened in its affairs with financial aid, advice, arms, alignments and troops; and finally, some reasons why they continue to perpetuate these massive manifestations of their great power. Textbook and a daily newspaper are employed. (Mr. Bunnell)

430—1 Men, Women and American Culture (439)

(2961) Four prepared class periods. This course is designed to help students understand the experiences of men and women in American culture from the Victorian age to the present. Using interdisciplinary materials from social and intellectual history, psychology, anthropology, and literature, this course will explore how American culture has defined its ideals of masculinity and femininity since the mid-nineteenth century. We will study a variety of topics: Victorian sexuality, sex roles on the frontier, the "cult of true womanhood," moral reform in the Progressive Era, manliness and the Strenuous Life, sex roles in the Roaring Twenties, the family and the Great Depression, the return of domesticity in the Fifties, and the pros and cons of the Women's Liberation Movement. The course will include lectures, films, discussion, guest speakers, exams, and several papers. Reading will include Peter G. Filene's *Him/Her Self: Sex Roles in Modern America*; Elizabeth and Joseph Pleck, *The American Male*, and other books and articles. (Ms. Dalton, Mr. Rotundo)

HISTORY COURSES

450—2 A Social History of Families in America (436)

(2652) Four prepared periods or the equivalent. For Seniors. This course is based on the assumption that the social structure of American Society is dependent on the nature of the family. Family constitution has changed over time because of immigration, changing sex roles and mores, the creation of the concept of adolescence, and women's liberation among other reasons. This course will examine these developments as well as changing relationships between husbands and wives and parents and children from the colonial period to the present. Readings are drawn from primary and secondary sources. Students are asked to write a series of critical essays as well as the history of their family in America. (Ms. Amster)

460—12 American Urban History (434) (Not offered 1982-82.)

Four prepared class periods or the equivalent. Limited to fifteen Seniors and Upper Middlers. Heavy emphasis on seminar skills useful for college and beyond: selective reading, effective writing *via* nine brief weekly papers, oral presentations, analytical and interpretive thinking. Fall Term work focuses not only on definitions of "city" and "American city," but also on the proper role of the historian toward the city, and on the evolution of the city from prehistoric times through the American colonial period. The Winter Term deals with different "types" of American communities and cities—such as Lowell, Washington, Oneida, New York, Salt Lake City, Los Angeles—evolving between the Eighteenth and Twentieth Centuries.

The course entails occasional visits to Boston and Lawrence, and continuous monitoring of ten urban newspapers, such as the *Atlanta Constitution*, the *Chicago Tribune*, and the *Denver Post*. General readings include: Edward Banfield, *The Unheavenly City Revisited*; Lewis Mumford, *The City in History*; urban novels like Theodore Dreiser, *Sister Carrie*; and monographs like Gunther Barth, *City People*. (Mr. Quattlebaum)

460—3 American Urban History (434)

(2663) **Prerequisite:** Permission of the instructor. This course is part of the *Urban Studies Institute (Social Science 420)*. The student embarks on an individual, historical research project, either on a particular American city or on a selected aspect of several cities. (Mr. Quattlebaum)

The following two courses, though they are neither "surveys" nor "issue-oriented" seminars satisfy the fourth trimester 300-400 level diploma requirement.

(2683) History and Mathematics (440)

Four prepared periods. Prerequisite: permission of the Instructors. This course provides an introduction to the ways of which elementary mathematics is employed in the study of history. Attention focuses on three main areas: elementary statistics and data analysis; entertaining historical controversies; and the logic of historical inquiry—that is, how to design a history research project. To accomplish these purposes, participants do assigned homework problems in mathematics and read exemplary works in the field, in order to discuss their merits and demerits. Most of the reading is from two books: Hubert M. Blalock, Jr., *Social Statistics*; and Robert P. Swierenga (ed.), *Quantification in American History*. (Mr. Quattlebaum, Mr. Best)

(2692) Topics in the History of Phillips Academy and Abbot Academy (443)

Four prepared class periods or the equivalent. Involving work in the Phillips Academy and Abbot Academy Archives on some aspect of history of the schools, the course introduces the student to the problems of working with the raw materials of history. Permission of the instructor is required for enrollment. (Mrs. Quattlebaum)

Interdisciplinary

All courses are electives. Courses in this section may be taken during more than one trimester unless the individual description indicates to the contrary.

(9311) Basic Study Skills

(9312) Four class periods. Not open to Juniors in the

(9313) Fall. The course is designed to help students build effective reading and study skills through

understanding more about the learning process. Class discussion focuses on the problems of motivation, concentration and retention. Exercises are designed to work on improvement in each of these areas and to develop proficiency in planning studying time, in developing accurate yet flexible reading comprehension, in taking notes or marking books, and in preparing for exams. When possible, students' texts from other courses are used for instruction. **Prerequisite:** permission of the instructor. (Mrs. Bellizia)

(9351) Etymology

(9352) Four prepared class periods. For all classes.

(9353) Training in the interpretation of English words by systematic analysis of elements derived from

Greek, Latin and other Indo-European languages. Exercises expand vocabulary and develop precision of expression and understanding. The course may be taken for at most one term.

(9371) Greek Literature in Translation

Four prepared class periods. Open to all classes.

A systematic study of the masterpieces of early European civilization as seen in their proper literary, intellectual, and historical context. In what is essentially a history of ideas, the major *genres* of epic, tragedy, comedy, satire, history, erotic poetry, and philosophy are stressed as aspects of the wider evolution of early European thought which laid the basis for modern civilization. The major problems which still confront human life are explored through the writings of Homer, Aeschylus, Sophocles, Euripides, Herodotus, Thucydides, Aristophanes, Plato and others. (Dr. Pottle)

(9362) Mythology

(9363) The interest of the Twentieth Century in Classical Mythology has stemmed from three main

sources: the psychoanalytical use of myth, progress in the field of classical archaeology, and anthropological study of myth. Preliminary exploration of the works of Freud in psychology, Schliemann and Evans in archaeology, and Frazer, Graves, and Levi-Strauss in anthropology leads to the detailed study of the myths of Oedipus, Theseus, and

Agamemnon among others. The myths are considered living entities changing in the hands of each artist who deals with them whether it be Homer or Joyce, Aeschylus or O'Neill, an anonymous Greek vase painter or Dali, Euripides or Strauss. Works of literature, art, and music provide the core for the study of the use of myth in human life. This course may be taken for at most one term. (Mr. Krumpe)

(9342) Perspectives on Creativity

(9343) Open to Seniors and Upper Middlers. Two double periods plus a weekly conference. An ex-

ploration of the creative process from genesis to fruition (beginning with the human reproductive process as the first instance of creativity with which all human beings are involved), the course will examine motivations and theories of creativity and the extent to which a creative act is the result of the self attempting to reproduce the self. There are strong views among psychologists (especially Jung and Hillman) about the nature and origin of human creativity, and there are equally persuasive arguments among artistic creators about the development of esthetics and beauty. In addition, social scientists offer opinions about the effect of educational settings and social and cultural contexts upon creative work. To synthesize these views, the course will feature guest instructors from within and from outside the Phillips Academy community who will demonstrate theory and practice in these various creative fields. Reading will be taken from the work of Rollo May, Jung, Freud, Koestler, Holt, and writers of fiction. Text: Rothenberg and Hausman, *The Creativity Question*. This course may be taken for at most one trimester. (Ms. Kubler-Merrill and Mr. Bellizia)

(9392) Roman Literature in Translation

Four prepared class periods. Open to all classes.

A systematic study of the Latin masterpieces as seen in their proper literary and historical contexts. The central theme of the course is that of the artist and his or her society in an age of empire. Through the writings of Cicero, Vergil, Ovid, Suetonius, Tacitus, Petronius, Apuleius and others, this course examines the tension which held between the realm of artistic self-expression and the world of political power realities. The larger question of the relationship between the artist-intellectual and his or her society is studied in the context of imperial Rome. (Dr. Pottle)

(9401) Russian Literature in English

Four prepared class periods. The themes of

romanticism, realism, the "superfluous person," Slavophilism, westernism, nihilism, perfectionism, and humanism are examined in the works of Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Ostrovsky, Dostoyevsky, Tolstoy, Chekhov, and Gorky, both as styles of literary expression

and as stimuli of Russia's social and political development. (Mr. Lane)

(9412) **Soviet Literature in English**

Four prepared class periods. A study of the conflict of individual freedom and social purpose in Russia since the Revolution, based on selected translations. Socialist realism, satire, divided personality, and dissent are examined against the Soviet political and economic background and in the perspective of Russian literary traditions. (Mr. Lane)

(9601) **Typing**

(9603) This course in personal typing is open to all students; it is designed for beginners to learn the keyboard and basic typing skills. There is no charge, but students must supply their own typewriters. This course does not earn academic credit. (Mrs. DiClemente)

For other courses which are interdisciplinary in nature, see Art 311 and Social Science 320.

Mathematics

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late twentieth century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his energies and curiosity to the organization or dissemination of mathematical knowledge.

The mathematics curriculum is built around a core sequence of eight trimester courses: three of elementary algebra, two of geometry and three of precalculus topics. The completion of these eight trimesters will satisfy diploma requirements, but an additional trimester may be required of some students before entering the calculus. Placement of new students in the appropriate first course is made by the department considering the record in previous schools, the results of a self-administered diagnostic

test in elementary algebra which is sent to newly admitted students in the Spring, and the course program chosen by the entering student. In general, algebra courses taken before the eighth grade and geometry courses taken before the ninth grade will not earn placement credit. Examinations to validate first and second year algebra skills are given early in the Fall trimester, at which time students who are incorrectly placed can be shifted to higher or lower level courses.

Students entering with no prior study of algebra start with *Mathematics 10*; those with a partial year of algebra enter *Mathematics 11*. Students entering with a full year of algebra start with *Mathematics 20-12*. If the results of placement testing indicate a need for *Algebra Review*, then students who have not taken geometry start with *Mathematics 19-1* and continue to *Mathematics 20-23*.

Those who have taken one year of algebra and one year of geometry will satisfy diploma requirements by taking the first three precalculus trimesters: either *Mathematics 30*, or *Mathematics 32* and *35 (T2)*.

If, on the basis of our testing, a student's algebra skills are weak, then *Mathematics 25-0*, an intermediate algebra course, may be required before precalculus.

It is best to take the College Entrance Examination Board Achievement Test in Mathematics near the end of or immediately following the precalculus sequence.

For students who wish to go beyond the required level, the department offers many electives, some of which lead up to and beyond the Advanced Placement Calculus Examinations of the College Board. The prerequisites of these electives courses should be noted, particularly by students who are involved in Off-Campus Programs.

Computer

In addition to its course offerings, the department houses the campus computer time-sharing system. The computer, a Digital Equipment Corporation PDP-11/70, is housed in the Mathematics building and serves sixteen terminals, of which ten are available for student use.

The department also has microcomputers available for student use. At the present time there are two Radio Shack TRS-80 Level II with 16k ROM, two 48k ROM Apple II with disk drives, an IBM 5110 with printer, and two Hewlett Packard HP-85.

Hand Calculators

Every student taking Mathematics or Physical Science must have a suitable hand calculator capable of handling square roots, sines, cosines, reciprocals, logarithms and exponents. Any calculator with *sin*, *log* and inverse function keys is adequate for all course use.

COURSES LEADING TO SATISFACTION OF THE DIPLOMA REQUIREMENT:

10—0 Elementary Algebra

(3100) Five prepared class periods. A year-long course for students who have had little or no algebra.

Stress is placed on an understanding of the elementary structure and language of the real number system, on the manipulative skills of simplifying expressions and solving first and second degree equations, and on the study and graphing of polynomial functions. Significant work is done with word problems, inequalities, irrational numbers, right triangle trigonometry, and an introduction to computer programming in BASIC. **Prerequisite:** None.

11—0 Elementary Algebra

(3110) Five prepared class periods. A year-long course for students who have had previous instruction

in algebra but whose knowledge and skills are not strong enough to enter the regular second level course. The topics covered are the same as *Mathematics 10—0*, but the problems range over a greater breadth and depth. **Prerequisite:** A half to a full year of algebra.

19—1 Algebra Review

(3191) Five prepared class periods. A course for students who enter with a full year of algebra

whose knowledge and confidence in algebra indicate they need a brief review of algebra. **Prerequisite:** A full year of algebra.

20—12 Geometry (T2) (a two-term commitment)

(3204) Five prepared class periods. A two-term course

20—23 for students who have had a *strong* ninth grade algebra course, but no geometry. This course is

(3205) a thorough and systematic presentation of

synthetic Euclidean geometry. Strong emphasis is placed on the need for precision and clarity in the writing of formal proofs. **Prerequisite:** A complete course in elementary algebra comparable in coverage to *Mathematics 10—0*.

25—0 Algebra Consolidation

(3250) Five prepared class periods. A course for new students entering Phillips Academy with one

year of algebra and one year of geometry. Required of those students whose elementary algebra or whose general mathematical maturity may prove inadequate to sustain precalculus studies. Comprehensive review of elementary algebra. Coordinate geometry. Introduction to algorithms and use of the computer. Extended problem solving. This course will normally be followed by a precalculus course.

30—0 Precalculus

(3300) Five prepared class periods. A year-long course for students with one year of algebra and one year of geometry. Completion of this course satisfies the diploma requirements. Topics include use of the computer; the structure of groups and fields, with applications to elementary algebra; polynomial, circular, exponential and logarithmic functions and their applications.

Upon completion of the course, students with department permission may enter *Mathematics 51—1*, or *Mathematics 55—0*. Those who do not receive permission must first take *Mathematics 36* if they wish to enter the calculus sequence. **Prerequisite:** Credit for one year of algebra and one year of geometry, or *Mathematics 20—23*.

31—0 Geometry and Circular Functions

(3310) Five prepared class periods. A year-long course for entering students who have not studied geometry. The course covers Euclidean and coordinate geometry, the circular functions and their geometrical applications. **Prerequisite:** Credit for one year of elementary algebra and one year of intermediate algebra.

32—3 Precalculus

(3323) Five prepared class periods. Topics in intermediate algebra, including sets; properties of real numbers; factoring; fractions; exponents; radicals; solutions of linear, quadratic, and radical equations. **Prerequisite:** *Mathematics 20*, or its equivalent.

35—12 Precalculus (T2) (a two-term commitment)

(3354) Five class periods, four prepared and one unprepared. More topics in intermediate algebra, including use of the computer; absolute value; inequality; linear, quadratic, polynomial, exponential, logarithmic, trigonometric, and inverse functions; graphing and applications of these functions. Completion of this course satisfies the diploma requirement. **Prerequisite:** *Mathematics 32*, or its equivalent.

36—1 Precalculus

(3361) Four prepared class periods. Required of students coming from 35 (T2) who plan to study calculus. Topics that bridge the gap between algebra and calculus, including exponential,

logarithmic, circular and trigonometric functions. If time allows, the course may include an initial contact with summation, area under a curve, and the definite integral. **Prerequisite:** *Mathematics 35* or its equivalent.

40—12 Elementary Functions (T2) (a two-term commitment)

Five prepared class periods. A two-term course for entering Seniors who have not had trigonometry but have studied three years of mathematics in high school. Required of those students whose prior work may be found not to satisfy diploma requirements. Work focuses on a review of the fundamentals of algebra, and the elementary functions. Enough trigonometry is done in the Fall Trimester so that students with high quality work may satisfy the diploma requirements and take *Mathematics 50—23 (T2)*. **Prerequisite:** Credit for three years of high school mathematics. Not open to students from *Mathematics 30, 35, or 36*.

ELECTIVE COURSES

Only courses with sufficient enrollment will be given.

17—1 APL For Beginners

(3171) Four prepared class periods. An introduction to the APL language and programming techniques. Designed to complement elementary algebra courses. No prior programming knowledge required. **Prerequisite:** For Juniors and Lowers currently enrolled in *Mathematics 10, 11, or 19*.

33—3 Exploring Data (Formerly Math 41)

(3333) Four prepared class periods. An introduction to techniques of uncovering the useful information contained in masses of numerical data. No reliance is placed on the knowledge of or development of heavy mathematical tools. **Prerequisite:** None.

42—12 Probability and Statistics (T2) (a two-term commitment)

(3424) Four prepared class periods. Includes sample spaces, counting problems, sampling, conditional probability and applications using the computer. Random variables, expected value, variance and standard deviation. Applications of the binomial and standard normal distributions, hypothesis testing and statistical inference. **Prerequisite:** *Mathematics 30 or 35*.

42—3 Statistics

(3423) Four prepared class periods. Applications of statistical inference to social and physical sci-

ences. Estimation and hypothesis testing. **Prerequisite:** *Mathematics 42—12 (T2)*.

43—3 Problem Solving

(3433) Four prepared class periods. A variety of non-routine problems drawn from some of the major ideas of precalculus mathematics, requiring various degrees of insight and creativity, will be considered. A synthesis of mathematical knowledge and methods will be the major goal of the course. For example, an inequality might be developed both algebraically and geometrically and then applied to problems in Solid Geometry, Trigonometry and Logarithms. **Prerequisite:** *Mathematics 30 or 35* (may be concurrent).

45—1 Mathematics Revisited

(3451) Four prepared class periods. A course of refreshment for those who have satisfied diploma requirements early in their high school careers but who have since discovered a vocational or other need for resuming study. **Prerequisite:** Prior completion of diploma requirements and departmental permission.

47—1 Beginning Computer

(3471) Four prepared class periods. An introduction to programming in the BASIC-PLUS code. The solution of mathematical problems with computer assistance. Depending on the instructor, the focus may be on a central theme such as cryptanalysis, statistics, data processing, or linear programming. **Prerequisite:** *Mathematics 30 or 35*.

48—2 Intermediate Computer (Formerly Math 49—2)

(3482) Four prepared periods. The course will include topics such as files and systems analysis; design, documentation, testing and implementation of a generalized information system and a project selected by the student. Structured programming and modular design will be stressed. **Prerequisite:** *Mathematics 47* or permission of the department.

49—3 Intermediate Computer: PASCAL

(3493) Four prepared periods. The course will introduce the PASCAL language and include such topics as text editors, compiled languages and data types. **Prerequisite:** *Mathematics 47* or permission of the department.

50—23 Elementary Calculus (T2) (a two-term commitment)

(3505) Four prepared periods. This course, for Seniors only, does not specifically prepare for the Advanced Placement Examination. The approach to calculus is concrete, informal and applied, as opposed to abstract, deductive, and

theoretical. Topics include applications of the derivative and integral to problems of optimization, curve sketching, rate of change, area, volume, and work. Techniques will be developed to apply derivatives and integrals to logarithmic, exponential, trigonometric and inverse functions. **Prerequisite:** *Mathematics 36—1*, or an equivalent course in trigonometry and elementary functions.

51—1 Elementary Calculus

(3511) Five prepared class periods. The first of a three

51—3 course sequence that covers the syllabus for the

(3513) AB Advanced Placement Examination of the College Entrance Examination Board. Topics

covered include: review of functions and graphing, theory of the definite integral, introduction to the derivative and its applications. **Prerequisite:** *Mathematics 30* with department permission; *Mathematics 36*, or the equivalent.

52—12 Elementary Calculus (T2) (a two-term

(3524) commitment)

52—23 Five prepared class periods. Course finishes the

(3525) AB Advanced Placement Syllabus. Theory of

the derivative, Chain Rule of differentiation, related rates, Rolle's Theorem, Mean Value Theorem, techniques and applications of integration, Fundamental Theorem of the Calculus. **Prerequisite:** *Mathematics 51*.

54—3 Infinite Series and Differential Equations

(3543) Five prepared class periods. This course extends the work of *Mathematics 52* to prepare the

student for the College Board BC Advanced Placement Examination. **Prerequisite:** *Mathematics 52* or may be taken simultaneously with 52.

55—0 Honors Calculus

(3550) Five prepared class periods. A year-long course in analytic geometry and calculus which begins

only in the Fall. Students contemplating Off-Campus Projects at some time during the year should not enroll in this course. Enrollment is limited to able and committed mathematics students, as the coverage is more theoretical and extensive than that of *Mathematics 51, 52*. Satisfactory completion of this course prepares for the College Board BC Advanced Placement Examination. **Prerequisite:** *Mathematics 30* or *36—3*, and departmental permission.

61—0 Calculus Continued and other Topics

(3610) Four prepared class periods. The course completes preparation for the College Board BC

Advanced Placement Examination, but also includes additional topics at the discretion of the instructor. Students from

Mathematics 55 or others with grades of 4 or 5 on the BC Advanced Placement Examination must have departmental permission. **Prerequisite:** *Mathematics 52*.

65—0 Calculus of Vector Functions

(3650) Four prepared class periods. For students of demonstrated ability and interest. Vectors and the geometry of 3-space, functions of many variables, partial differentiation, multiple integration, line integrals, Green's Theorem, Stokes' Theorem, linear transformations and matrices. **Prerequisite:** *Mathematics 55* or its equivalent.

68—123 Mathematics Seminar

(3681) A course for students who have finished

(3682) *Mathematics 65*. The topics studied will vary

(3683) according to the needs and interests of the students. **Prerequisite:** *Mathematics 65*.

SPECIAL COURSES

Mechanical Drawing 30, 31, and 32 are given at the same time in the same room by the same instructor, with the total number of students being limited by the number of work stations.

30—1 Mechanical Drawing (Elementary)

(3701) Two prepared class periods and four unpre-

30—2 pared. Not open to Juniors. A term-contained

(3702) beginning drawing course that includes the use

30—3 of drawing instruments, lettering, geometric

(3703) constructions and loci, sketching, orthographic

projection, and spatial relations. Special stress is placed on a thorough mastery of fundamental concepts and skills.

31—1 Mechanical Drawing (Intermediate)

(3711) Two prepared class periods and four unpre-

31—2 pared. A term-contained technical drawing

(3712) course in applied Descriptive Geometry and

31—3 Graphics involving work in sectioning and con-

(3713) ventions, isometric and oblique pictorial projec-

tions, intersections, primary auxiliary views, and developments. **Prerequisite:** *Mechanical Drawing 30*.

32—1 Mechanical Drawing (Advanced)

(3721) Two prepared class periods and four unpre-

32—2 pared. A term-contained technical drawing

(3722) course consisting of substantial work in dimen-

32—3 sioning, inking, detail and assembly engineer-

(3723) ing drawing, print reading, perspective and/or

fundamentals of design. **Prerequisite:** *Mechanical Drawing 31.*

In general, *Navigation 30* is given in the Fall and Winter and *Navigation 31* is given in the Spring. Depending on the availability of the instructor both courses are sometimes offered in the Spring.

30—1 Navigation (Coastal Piloting)

- (3731) Four prepared class periods. Not open to
- 30—2 Juniors.** A term-contained course in Piloting;
- (3732) i.e., marine navigation within sight of land or
- 30—3 landmarks.** Substantial dead reckoning and
- (3733) special case plotting is done on charts and small area plots. Aids and dangers to navigation are

studied. Practical use is made of Tide and Current Tables, Light Lists, compass correction, and electronic aids.

31—2 Navigation (Celestial)

- (3742) Four prepared class periods. A term-contained
- 31—3 course in Celestial Navigation:** i.e., navigating
- (3743) at sea by means of the stars, sun, moon, and planets. Nautical astronomy is studied. Signifi-

cant work is done in coordinate conversion, time, altitude intercept theory, the solution of the Navigational Triangle by HO 214, HO 229, and the Nautical Almanac, special lines of position, the use and correction of a marine sextant, times of observational twilight, and "a day's work" at sea. **Prerequisite:** *Navigation 30.*

Modern Foreign Languages

Andover's requirement of at three high-school years of an ancient or modern language rests on the firm belief that direct acquaintance, through language, with the spirit and people of other lands is a psychological and intellectual resource of inestimable value for each individual, for every country, and for our common world.

The diploma requirement is satisfied by completion of three trimesters at the 30-level reached through the regular sequence, or by one trimester of 40-level reached through the accelerated sequence. Placement of new students is based on their previous school record, on the questionnaire sent to them and their

current language teachers in the spring, and, when appropriate, on a personal interview with the language chairman at Andover. Details regarding various options and the diploma requirement as it is applicable to "incoming Uppers and Seniors who begin a new language at Andover" are available from the Registrar's Office.

With the exception of Italian (limited to Seniors), each of our languages, ancient and modern, may be appropriately be started by students of any grade, Juniors (9th) through Seniors. Many Andover students continue their language study beyond the third year, and a good number of them simultaneously study two or even three languages.

Small classes, flexible placement, and opportunities for acceleration assure that each student is in the optimum learning situation. The foreign language is the language of the classroom. In conversation, in reading, and in writing, the goal is direct communication in the foreign language rather than through translation. The classroom experience is expanded by the language laboratory; media resources (e.g., periodicals, radio broadcasts, movies); the staging of plays; club activities; language events and programs at Andover or nearby schools. At all levels of instruction attention is focused both on basic language skills and, increasingly, on the literature, history, and various art forms which reveal the people whose languages are being studied.

For information on School Year Abroad and other opportunities to study abroad, students should see their language instructor or the chairman of the Language Division.

Chinese

10-20—0 Intensive Chinese

- (4420) Five prepared class periods. Open to Seniors, with permission of the Language Division. An introduction to modern spoken and written Chinese (Mandarin), stressing pronunciation and oral-aural facility, and including the reading and writing of characters. Extensive use of language laboratory.

French

The French Department offers a six-year course of study. The first two years are devoted to teaching the basic language structures. Students who demonstrate

unusual aptitude and interest during the first year are invited to enter special accelerated sections. In the third year, while continuing to progress in all language skills, a student is given the opportunity to choose trimester courses which best serve his needs. Fourth and fifth-year courses offer study in depth of both literature and civilization. At all levels, French is the language of the classroom.

10—0 Beginning French

(4010) Five prepared class periods. First-year French for students who have had no previous courses in the language. Students make frequent use of the language laboratory. Listening comprehension and the use of basic patterns of French speech are emphasized. Elementary grammatical and idiomatic structures are introduced, as well as simple reading material. Text: *Méthode de Français*, Boorsch-Capretz.

11—0 First Level French

(4030) Five prepared class periods. This first-level French course is designed to help the student who has had previous instruction in the language, but whose knowledge and skills are not secure enough for him to enter a regular second-level section. It is also appropriate for students with experience in other languages who wish to begin the study of French. The course emphasizes the development of aural-oral skills and prepares for French 21 the following year. Text: *Méthode de Français*, Boorsch-Capretz.

12—23 Accelerated First-Level French (T2) (a two-term commitment)

Five prepared class periods. An accelerated course beginning in the winter and offered to students in French 10 and French 11 who are doing honors work. This course is continued in French 22. Text: *Méthode de Français*, Boorsch-Capretz.

20—0 French

(4050) Review of basic skills. Five prepared class periods. For students who have successfully completed French 10 or 11 but need strengthening in fundamentals. By permission of Department Chairman. Texts: Connolly, *Le Français Langue Seconde*, books 2, 3 and 4; Jarvis, Bonin, Corbin, Birkbichler, *Connaître et se connaître*.

21—0 Second-Level French

(4060) Five prepared class periods. For students who have completed French 10 or 11 and for new students who qualify through teacher recommendations or

placement examination. While continuing to develop aural-oral skills, the aim of this course is to teach reading and the ability to understand non-technical French prose. Texts: Connolly, *Le Français Langue Seconde*, books 3, 4 and 5; Campbell et Bauer, *La Dynamite*; Sempé-Gosciny, *Le Petit Nicolas*.

22—12 Accelerated Second-Level French (T2) (a two-term commitment)

Five prepared class periods. An accelerated Honors course open to students who have completed French 12 and to qualified students with permission of Chairman. Successful completion of this course permits students to enroll in regular courses at the third level during the Spring Term. Texts and reading materials include: Sempé-Gosciny, *Le Petit Nicolas*; Sartre, *Les Jeux sont faits*; Sturges, Cregg, Herbst, *Une fois pour toutes*, Kirkland, Knox, *A mon avis*. By permission of Department Chairman.

Third-Level Courses

Enrollment for French 30A is by permission of Department Chairman. All other electives may be chosen in any sequence: they are of equal difficulty, continue the development of all language skills, and are unified by a common grammar syllabus (Sturges, Cregg, Herbst, *Une fois pour toutes*). The Department urges students to seek variety and balance in choosing electives.

30A—0 Language Review and Contemporary French Life

(4080) Five prepared class periods. For students who have successfully completed 20 or 21 but who need further instruction in basic language structures. By permission of the Department Chairman. Texts: Sturges, Cregg, Herbst, *Une fois pour toutes*; Sartre, *Les jeux sont faits*; Pagnol, *Marius*.

31—123 Selected Readings

(4101) Four prepared class periods. Reading comprehension skills are developed through a study of texts such as the following: Simenon, *Le Chien Jaune*; Saint-Exupéry, *Le Petit Prince*; Pagnol, *Topaze*; Vercors, *Le Silence de la mer*; Gosciny, Uderzo, *Astérix et Obélix: Le Tour de Gaule*; Camara Laye, *L'Enfant Noir*.

32—3 Village Français

(4113) Four prepared class periods. Using, as points of departure, the impressions and misimpressions which French and Americans have of each other's culture, this course attempts to give the student a greater understanding of the French people and their institutions as reflected in the microcosm of a town. With the student's home-

town as a basis of comparison, several French towns are examined in depth, including the provençal towns of Roussillon and Cassis and a town of the student's own choice. The basic text, Wylie, *Village en Vaucluse*, is complemented by readings, lectures, original documents and both national and regional newspapers and magazine articles.

33—1 French History

(4121) This course concentrates on the main events and personalities from the reign of Louis XIII to the founding of Third Republic in 1875. There is a combination of lectures by the instructor, class discussions, slides and film presentations. Probable text: *Histoire-Geographie IV* by Pernet and Baleste.

34—1 Intensive Conversation

(4131) Four prepared class periods. A special emphasis on specific aspects of spoken French. Intended for students who understand French rather well but need to gain confidence and fluency in speaking. Dialogues, speeches, debates, interviews, and role-playing are reinforced by study of topical vocabulary and idiomatic expression. Text: Frautschi and Bouygues, *Pour et contre*.

35—2 Written Expression

(4142) Four prepared class periods. Study and writing of basic sentence structures and their integration into paragraphs and compositions. Students' writing, to which instructors give close, individualized attention in small classes, is based generally on selected, short readings. The course seeks a balance between different forms of writing, both original and imitative (description, narration, dialogue, exposition, communication). Text: Limouzy et Bourgeacq, *Manuel de composition française*.

36—2 Literature and Film

(4152) Four prepared class periods. Usually two works of fiction are studied along with two films each term. The books and films for the course vary from year to year.

37—1 Le Journalisme

(4161) Four prepared class periods. The course consists of a series of journalistic assignments — from opinion polls to want ads — each designed to reproduce the style of a section of a French magazine. Before handing in the draft of each assignment, the group discusses journalistic models, works on exercises based on structures in the texts,

and writes pastiches together using vocabulary from given lists. At the end of the course teacher and students may act as editors of a class magazine.

39—3 Initiation to the French Theatre

(4173) Four prepared class periods. An active participation course in which the student follows one play from the initial reading through its final production, taking part in each of the four major phases: Reading, Analysis, Production, Performance. Throughout the course, the vocabulary of French theatrical production is studied and used.

40—123 Fourth-Level French

(4181) Four prepared class periods. The course consists of three term-contained units and may include the reading of French classics and the works of modern authors, as well as conversation and composition. The choice of texts in each trimester is determined by the class and the instructor.

42—0 French Literature

(4190) Four prepared class periods. The first year of a two-year sequence leading to the Advanced Placement Examination in French Literature, open to students who have completed three trimesters of third-level courses, or French 22 plus one third-level trimester course; also open to properly qualified new students. It is a transition from the study of language to the study of literature. Emphasis is placed on vocabulary building, written work, and close analysis of major literary works. Texts include: Camus, *L'Etranger*; Voltaire, *Candide*; Sartre, *Huis clos*; Balzac, *Le Colonel Chabert*; and Mauriac, *Thérèse Desqueyroux*. Permission of the Department Chairman required.

This course is also offered in the School Year Abroad program in Rennes.

43—12 French Civilization

(4201) Four prepared class periods. For students with a particular interest in France's past civilization and cultural achievements. A thematic study is made of the great periods of French civilization from its origins in Celtic Gaul through the end of the 19th century. Areas studied include historical, social, artistic, and literary developments. Each course is a combination of lectures, class discussions, slides, films, and students' oral reports. It is complemented by the reading of short literary and historical selections.

The first trimester begins with an introduction to French geography and then examines ancient Gaul, the era of Charlemagne, medieval society, the Renaissance, and the "Grand Siècle" (17th century). The second trimester studies the ideas

of the philosophers and revolutionaries which influenced European and American life and political institutions. Also discussed are the important social and economic changes brought on by the Industrial Revolution.

43—3 Le Monde Francophone: French Civilization Outside of Europe

Four prepared class periods. As an international colonial power France spread her culture throughout the world. The course studies the resistance to and the assimilation of French culture by the native cultures. The student has the opportunity to study the 17 French civilizations of West, Equatorial, and North (Arab) Africa as well as the French civilization of the Antilles (Haiti, Martinique, and Guadeloupe). In addition to geographical, social, and historical study, selections are read from authors such as President Senghor, Cheikh Hamidiou Kane, Aimé Césaire, Guillaume Oyo M'Bia, Birago Diop. (Not offered in 1982-83. Offered in 1983-84)

43—3 Québec et les Québécois

(4203) Four prepared class periods. Because of its geographical situation Phillips Academy has a unique opportunity to merge the study of French with direct observation of and participation in the North American "French experience" which is just across the nearby Canadian border as well as in the many communities surrounding Andover with large Franco-American populations. Some amount of theory is balanced with observation and analysis of everyday life in Québec province to understand its political, economic, and social institutions, and such areas as religious, educational, and artistic life. Emphasis is on a close study of the media of the province as well as personal involvement through liaison with Québec schools, students and newspapers, and through contact with French-speaking areas of Massachusetts and New Hampshire. The course may culminate in a trip to Québec. (Offered in 1982-83. Not offered in 1983-84).

44—1 Advanced Conversation and Phonetics

(4221) Four prepared class periods. Intended for students who understand, read and write French well and who already speak at a competent level, but who feel the need for further drill in conversational patterns, and idiomatic expression. Diction, intonation and elocution are also stressed through memorization, role-playing, speeches, and debates. Text: Knox, *Rencontres*.

51—123 Advanced French Language

(4261) Five prepared class periods. A course designed to meet the requirements of the Advanced
(4262) Placement Examination in French Language.
(4263) Open to students who have completed three

terms of fourth-level French and to qualified new students. Emphasis is placed on vocabulary, conversation, composition, and reading, not only in literature, but in current newspapers and periodicals. The choice of texts is determined by the class and the instructor.

52—0 Advanced French Literature

(4270) Five prepared class periods. The second year of a two-year sequence, open with departmental permission to students who have completed *French 42* and to others who are properly qualified. This course is an introduction to French literature and prepares for the Advanced Placement Examination in French Literature through the close reading of representative texts including: La Fontaine, *Fables*; Molière, *L'Avare*; Racine, *Phèdre*; Beaumarchais, *Le Barbier de Seville*; Chateaubriand, *René*; Flaubert, *Un Coeur Simple*; Baudelaire, *Les Fleurs du Mal*; and poetry of Hugo, Rimbaud, Apollinaire, Césaire and Damas.

60—123 Contemporary French Literature

(4281) Two prepared class periods plus one weekly (90
(4282) minute) seminar. The course studies selected
(4283) novels and dramas representative of the Pre-War and Post-War eras. Emphasis is on particular writers and what they add to our understanding of the human condition in our times. Authors studied may include: Proust, Gide, Céline, Malraux, Mauriac, Aragon, Saint-Exupéry, Giono, Montherlant, Anouilh, Giraudoux, Aymé, Camus, Sartre, Robbe-Grillet, and Daninos.

(9001) Senior Projects

(9002) Qualified seniors may undertake independent
(9003) study projects in French under the direction of a faculty supervisor. Those who wish to do apprentice teaching during either the Winter or the Spring Term will study the techniques and methods of modern language instruction and will practice, under careful supervision, in beginners classes.

German

The German Department offers a six-year course of study with the purpose of developing the ability to understand spoken German, facility in speaking, reading fluency, and the ability to write German correctly. Students who demonstrate unusual aptitude and interest during the first year are invited to enter special accelerated sections

The more advanced courses may give an introduction

to German literature since the eighteenth century and a survey of German history, culture and geography. At all levels, German is the language of the classroom. Extensive use is made of the Language Laboratory.

10—0 First-Level German

(4300) Five prepared class periods. The beginning course seeks to develop aural comprehension and oral expression, as well as a foundation in the basic grammar. The basic patterns of the language are practiced by repetition and variation.

12—23 First-level German (Honors) (T2) (a two-term commitment)

(4305) Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of one trimester of *German 10*. Successful completion of 12 enables students to enter 22. Texts are essentially the same as those used in *German 10* and *German 20*.

10-20—0 Accelerated First and Second-Level German

(4310) Five prepared class periods. Open to Seniors, and to Uppers with permission. A year-long accelerated introductory course covering in one year the essential material of *German 10* and *German 20*. Basic text: *Deutsch Heute*, by Moeller and Liedloff (Houghton Mifflin).

20—0 Second-Level German

(4320) Five prepared class periods. The systematic study of basic patterns and grammar is continued. Both close and comprehensive reading of modern German prose is practiced extensively. Elementary writing is introduced at this level. Some of the books read include Kessler, *Kurze Geschichten*; Schnitzler, *Der blinde Geronimo*; Remarque, *Drei Kameraden*.

22—0 Accelerated Second-Level German

(4330) Five class periods. A year-long accelerated course open to students who have successfully completed *German 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth-level courses. Texts and reading materials are essentially those of *German 20* and *German 30*.

30—0 Third Level German: Selected Readings

(4340) Four prepared class periods. Emphasis is placed on reading comprehension, vocabulary building, and oral expression. Throughout the year grammar is reviewed in Sparks and Vail, *German in Review*. Some of the

books read include Brecht, *Kalendergeschichten*; Dürrenmatt, *Der Richter und Sein Henker*; Aichinger, *Der Gefesselte und andere Kurzgeschichten*; Dürrenmatt, *Der Besuch der alten Dame*; Ödön von Horvath, *Jugend ohne Gott*.

40—123 Advanced German Language and Literature

(4351) Five prepared class periods. This course is designed to prepare for the Advanced Placement Examination in German Language. Open to students who have completed the equivalent of three trimesters of third-level German and to qualified new students. Emphasis is placed on vocabulary, conversation, composition, and reading, not only in literature, but also in current newspapers and periodicals. The choice of texts is determined by the class and the instructor.

50—123 Fifth-Level German

(4361) Four prepared class periods. Contents vary according to the needs and interests of the students.
(4362)
(4363)

60—123 Sixth-Level German

(4371) Four prepared class periods. Contents vary according to the needs and interests of the students.
(4372)
(4373)

(9001) Senior Project

(9002) Under the guidance of a member of the German Department, a Senior has the opportunity to do special work in German. It may include supervised teaching of an elementary class, or work of his own choice in a special field.
(9003)

Italian

10-20—0 First and Second Level, Intensive

(4400) Open to Seniors, and to Uppers with permission. Five class periods. Four additional hours, to be arranged, will take the place of about ½ of the usual homework obligation: these small drill sessions, plus use of the language laboratory, will afford intensive review leading to spontaneity in understanding and speaking Italian. A basic college text is supplemented by selected readings, radio recordings, and the libretti and music of Italian opera. (Dr. Pascucci)

Russian

Communication in Russian and a knowledge of Russian culture are essential for productive interaction

with the U.S.S.R. in technology and science, and for achieving controlled, responsible international relations. Before studying Russian, many consider it strange and difficult; but its alphabet and vocabulary have the same sources as English, and it follows the same principles of grammar. Continuous oral, visual and instructional use quickly makes Russian familiar and enjoyable. The Russian Department offers a five-year course of study. This well-established program ensures confident progress in speaking, aural comprehension, reading and writing. Students who demonstrate unusual aptitude and interest during the first year are invited to enter special accelerated sections. It is the policy of the Department to attain exclusive use of Russian in the classroom no later than the middle of the first year.

10—0 Introduction to Contemporary Russian

(4500) Five prepared class periods. Open to Juniors, Lower Middlers, and Upper Middlers. A year-long elementary course in speaking, listening, reading and writing. Texts: Kostomarov, *Russian for Everybody* (Russky Yazyk-Moscow); reference materials.

12—23 Contemporary Russian (Honors) (T2) (a)
(4515) two-term commitment)

Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of one trimester of *Russian 10*. Successful completion of 12 enables students to enter 22. Texts are essentially those of *Russian 10* and *Russian 20*.

13—3 A Short course in Beginning Russian

(4523) Four prepared class periods. Open to Seniors and Uppers. A term-contained introduction to speaking, reading, and writing Russian, using scientific, literary, and conversational text materials. This course enables students to feel comfortable with the somewhat different features of a Slavic language. It also gives a sound foundation for continuing courses in Russian language, history, and literature, whether at Andover or in college. (Mr. Lane)

For other courses related to Russian history and culture see **History 338, History 339, and, in the Interdisciplinary section, Russian Literature in English and Soviet Literature in English.**

10-20—0 Intensive Contemporary Russian

(4530) Five prepared class periods. Open to Seniors, and to Uppers with permission. A year-long

accelerated introductory course covering two years in one. Texts: von Gronicka, *Essentials of Russian* (Prentice-Hall); Kostomarov, *Russian for Everybody*; *Graded Russian Readers* (Heath).

20—0 Intermediate Contemporary Russian

(4540) Five prepared class periods. Completion of the elementary course with continued emphasis on active use. Texts: Kostomarov, *Russian for Everybody*; reference materials and selected reading materials.

22—0 Intermediate Contemporary Russian (Honors)

(4550) Five prepared class periods. A year-long accelerated course open to students who have successfully completed *Russian 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth-level courses. Texts and reading materials are essentially those of *Russian 20* and *Russian 30*.

30—0 Russian Expression: Conversation and Composition

(4560) Four prepared class periods. Reading, conversation and writing. Texts: Khavronina, *Russian as We Speak It* (Progress-Moscow); *Reading for Meaning* (Harcourt); plus cultural and scientific selections.

40—123 Advanced Russian Composition and Russian Classical Literature

(4571) Four prepared class periods. Further work in conversation and writing, and an introduction to the "Golden Age" (19th Century) of Russian literature with selected readings from Pushkin, Chekhov, Gogol, Tolstoy and other writers. Texts: Muravyova, *Verbs of Motion in Russian* (Progress-Moscow).

50—123 The Soviet People, Their Heritage and Literature

(4581) Four prepared class periods. Fall Term: RUSSIAN LITERATURE, readings from prerevolutionary and contemporary authors.

Winter Term: THE SOVIET PRESS, a view of Soviet life and culture as reflected in the media. The text is a subscription to a major Soviet newspaper.

Spring Term: SOVIET PROTEST LITERATURE, a view of protest in the Soviet Union from the works of Solzhenitsyn, Yevtushenko, Okudzhava, Bulgakov, and others. Authors vary according to needs and interests of the class.

(9001) Senior Project

(9002) Under the guidance of a member of the Russian Department, a Senior has the opportunity to do special work in Russian. It may include super-

vised teaching of an elementary class or work of his own choice in a special field.

Spanish

The Spanish Department offers a six-year course of study. Students who demonstrate unusual ability and interest during the first year are invited to join an accelerated sequence which enables them to complete four years of work in three. The language of the classroom is Spanish, and extensive use is made of the Language Laboratory. Students learn to understand, speak, read, and write the language, and also are given a comprehensive introduction to the literature and culture of Spain and Hispanic America.

10—0 Beginning Spanish

(4610) Five prepared class periods. Making use of the audio-lingual approach the course stresses understanding and speaking. A minimum of English is used in the classroom. Text: *Spanish for Mastery I*, and workbook, Valette and Valette (D.C. Heath). These are supplemented by language laboratory practice, selected readings, and other audio-visual materials. Exercises in reading and writing are introduced after the student has acquired confidence in oral expression.

10A—0 Basic Spanish

(4610) Five prepared class periods. This course begins Winter Term. Designed for students who may profit from a more gradual pace in foreign language study, the course aims to enable the students to better assimilate the structure of the language and to acquire acceptable patterns of speech. Eligibility for this course is determined by an agreement reached by the student and the Foreign language teacher in consultation with the Chairman of the Department involved. Employing a variety of materials, the syllabus for the course will closely follow that of *Spanish 10*.

11—0 First Level Spanish

(4620) Five prepared class periods. For new students who have been exposed to Spanish but who are not fully qualified for *Spanish 20*. The course stresses the oral use of the language. Text: *Spanish for Mastery I*, and workbook, Valette and Valette (D.C. Heath) and selected readings. They are supplemented by language laboratory practice and other audio-visual materials.

12—23 Accelerated First-level Spanish (T2) (a 4625) two-term commitment)

Five prepared class periods. An accelerated course beginning in the Winter and offered to students in *Spanish 11* who are doing honors work and to students in *Spanish 10* who are doing high honors work. Successful completion of 12 enables students to enter 22. Text: *Spanish for Mastery I*, and workbook, Valette and Valette (D.C. Heath), and selected readings.

10-20—0 Accelerated First and Second-Level Spanish

(4630) Five prepared class periods. Open to seniors, and to Uppers with permission. A year-long accelerated introductory course covering two years in one. The basic texts are: *Spanish One* (Second Edition), by Jones/Ruiz Salvador (Van Nostrand); *Tres Farsas Contemporáneas y Un Secuestro* (see *Spanish 22*); *Cuentos y Microcuentos*, by Guillermo Castillo-Feliú (Holt, Rinehart & Winston) and selected poems and songs.

20—0 Second-Level Spanish

(4640) Five prepared class periods. Emphasis is on speaking, reading, simple theme writing, and vocabulary building, including the use of synonyms and antonyms. Oral fluency is stressed in accordance with the principles of the audio-lingual method. The basic text is: *Adelante* (see *Spanish 22*). Readings beyond the basic text are selected to meet the needs of each class.

22—0 Accelerated Second-Level Spanish

(4650) Five prepared class periods. Open to students who have completed *Spanish 12* with distinction, and to other qualified students with departmental permission. It covers the equivalent of the material of *Spanish 20* and *Spanish 30* and enables students to enter *Spanish 40* or *42*. Texts: *Adelante*, by Eduardo Neale-Silva, Robert L. Nicholas (Scott-Foresman); *Cuentos y Microcuentos*, by Guillermo Castillo-Feliú (Holt, Rinehart & Winston); *Tres Farsas Contemporáneas y Un Secuestro*, by Martines-Ballesteros, Rubio and Whitehead (Independent School Press) and selected readings. In Spring Term students occasionally read and stage a one-act play in Spanish.

Third Level Courses

Enrollment for *Spanish 30A* is by permission of Department Chairman. All other electives may be chosen in any sequence: they are of equal difficulty, continue the development of all language skills, and are unified by a common grammar syllabus (Couch, McCann, Rodríguez-Walter, Rubio-Maroto, *Una vez más*). The Department urges students to seek variety and balance in choosing electives.

30A—0 Spanish Language Review

(4660) Five prepared class periods. For students who have successfully completed *Spanish 20*, but need reinforcement in basic language structures. The goals of the course are achieved through the use of an intermediate grammar text, and readings which are selected according to the needs of the students. By permission of the Department Chairman.

31—123 Aspectos de la cultura y civilización del Mundo Hispánico

(4671) Four prepared class periods. An intermediate course which continues to develop oral and aural skills, as well as facility in written composition through a social-studies approach to the culture and civilization of the Hispanic world. Students must have demonstrated, in previous course work, a strong ability for self-expression and an interest in historical and cultural themes.

32—123 Introduction to Literature

(4681) Four prepared class periods. An intermediate course which continues to develop oral and aural skills, as well as facility in written expression. Class discussion and assignments are based on representative works of literature from throughout the Spanish-speaking world.

34—123 Conversation and Composition

(4691) Four prepared class periods. An intermediate course which has as its principal goal the development of conversational and writing skills by dealing with topics of a general nature.

35—2 Winter Term in Mexico

(4702) Students enrolled in a Spanish course at the 22 level or above may elect to spend the Winter Trimester in Mexico. Student intending to enroll in this course will do special research during the Fall Trimester under the direction of Mr. Couch and other members of the department. Interested students should see their Academic Advisor to be sure that their other courses and their diploma requirements will permit them to be off campus for that trimester. Final approval for participation in the program will be made by the Dean of Studies.

40—123 Spanish: Language, Literature, Culture

(4711) Four prepared class periods. The purpose of the course is to review, refine and expand speaking, reading and writing skills and to further the student's interest in the Hispanic world through readings in history and literature.

Students showing marked ability will be eligible to take the A.P. Examination in the Spanish Language. Texts used in the past have been: *Tesoro Hispánico*, ed. Lado et al. (McGraw-Hill); *El Burlador de Sevilla*, by Tirso de Molina (Taurus Ediciones); *Doña Bárbara*, by Rómulo Gallegos (Fondo de Cultura Económica); *Repaso de Gramática*, by Soto (Harcourt, Brace, Jovanovich).

42—0 Spanish and Spanish-American Literature

(4720) Four prepared class periods. The course presupposes an extensive knowledge of grammar and vocabulary and a reasonable fluency in conversation. Constant use of the Spanish language in classroom discussions and in written assignments is required. Particularly able students may take the Advanced Placement Examination in Spanish Literature if they so desire. Texts: Representative works of Ana María Matute, Unamuno, F. García Lorca, J.L. Borges, Pablo Neruda, and other literary works which complement the study of these major authors.

52—0 Advanced Spanish and Spanish-American Literature

(4730) Four prepared class periods. The course is open to students who have the equivalent of *Spanish 40* or *42*, or with the permission of the instructor. This course prepares the student for the Advanced Placement Examination in Spanish Literature or Language. The course is an in-depth study of two significant authors each term. In the past the following texts have been used: *Cien años de soledad*, by García Márquez (Editorial Sudamericana, Buenos Aires); *Historia universal de la infamia*, by Borges (EMECE, Argentina); *En torno al poema*, ed. García Montoro and S.A. Rigol (Harcourt, Brace, World, Inc.); *Tres novelas ejemplares, y un prólogo*, by Unamuno (Austral); *Antología Esencial*, by Pablo Neruda (Losada); *Ana María Matute*, Martí and Rubio (Independent School Press); *Cinco Maestros*, by Coleman (Harcourt, Brace and World, Inc.); *Fulgor y Muerte de Joaquín Murieta*, by Pablo Neruda.

60—123 Special Literary and Cultural Topics in Spanish

(4741) Four prepared class periods. Contents vary according to the needs and interests of the student.

(9001) Senior Project

(9002) Qualified Seniors may undertake projects of independent study in Spanish under the direction of a faculty advisor. They may also do apprentice teaching in beginning classes under faculty supervision.

See also **Latin American Studies (History 348)** listed under *History and the Social Sciences*.

Music

The diploma requirement in Music for entering Juniors and Lower Middlers is one trimester of music, which is satisfied by *The Nature of Music* (Music 20). This course is also a prerequisite for courses in the History and Appreciation category, but is not a prerequisite for the Applied category. Entering Upper Middlers must take a trimester course in Music or Art at the Academy: *Music 20* or its equivalent. Entering Seniors need not take a Music course. Exemption from *Music 20* as a prerequisite is granted on the basis of an exam and/or by permission of the Department Chairman. However, there is no exemption from the Music diploma requirement.

APPLIED

12—123 Brass Ensemble

(6121) Meeting three times a week, with outside preparation. Open to all classes. Open to qualified
(6122) intermediate or advanced players by permis-
(6123) sion of the instructor. The group has an oppor-
tunity to perform in Chapel and in other concerts. The ensemble is made into different types of groups, such as trios, quartets, quintets, and double brass choirs, to perform Renaissance, Baroque, and contemporary brass literature.

13—123 Woodwind Ensemble

(6131) Meeting three times a week, with outside prep-
(6132) aration. Open to all classes. Open to qualified
(6133) intermediate or advanced players by permis-
sion of the instructor. The ensemble is orga-
nized to allow a unique and comprehensive experience in the study and performance of chamber music repertory, in varied sizes of ensembles. Playing chamber music is an essential part in the development of the woodwind student.

14—123 String Ensemble

(6141) Meeting three times a week, with outside prep-
(6142) aration. Open to all classes. Open to qualified
(6143) intermediate or advanced players by permis-
sion of the instructor. These students find a
wealth of fine music written for various combinations of instruments, ranging from the relatively easy to the very difficult. Over the centuries composers have considered the strings a favored group. Chamber music is a particularly rewarding experience and is valuable training for all string students.

15—123 Fidelio Society

(6151) Pass/Fail. Three prepared periods. Open to all
(6152) classes. This small group of mixed voices is
(6153) selected from the *Chorus* (Music 17). It performs
on numerous occasions throughout the year
both on *Chorus* programs and on its own. Its repertoire in-
cludes music of all types, early and modern, sacred and
secular. Membership is by audition and is conditional upon
good standing in the *Chorus*.

16—123 Band

(6161) Two double periods. Open to all qualified stu-
(6162) dents. Tryouts are held any time before the be-
(6163) ginning of a term to test the student's ability and
to arrange for seating. Volunteers from all class-
es who are not enrolled for credit are urged to join, on an
extra-curricular basis. There are some school-owned instru-
ments available for student use. All types of music for wind
ensemble are rehearsed. It includes marches as well as clas-
sical, popular, and show music. Much sight reading is done,
and at least one public concert per term is given.

17—123 Chorus

(6171) Two double periods. Open to all qualified stu-
(6172) dents. The *Chorus* is the Academy's major sing-
(6173) ing group, comprised of mixed voices, and per-
forms a variety of choral works, both sacred and
secular. No previous choral experience is necessary; just a
desire to work hard and enjoy a unique choral experience.

18—123 Chamber Orchestra

(6181) Two double periods. Open to all classes. Most
(6182) of the music played is for string orchestra; the
(6183) best winds in the school are invited to join for
larger works. One concert a trimester is regular-
ly scheduled and the orchestra also plays at least once a
trimester in the Sunday Chapel service. The membership
includes several students from the community who want
orchestral experience that is not available in their own
schools, and several members of the faculty. While *Chamber
Orchestra* may be elected as a credit-bearing course, it is also
an activity in which all are invited to participate.

19—123 Private Instrument and Vocal Lessons

(6191) Two class meetings plus required concert
(6192) attendance. Lessons are available on all orches-
(6193) tral instruments including, in addition, piano
(classical or jazz), guitar, saxophone, organ,
harpsichord, carillon, and voice.

In addition to practicing daily, the credit students are
expected to meet the following commitments: 1) a once per
week meeting with their private instructor; 2) a once per

week seminar, providing a broader practical/theoretical background (credit students would be assigned seminar groups according to their instrument and background); 3) a required attendance of three concerts, on campus, per term.

There is a charge of \$140 per term for half-hour instruction, or \$200 per term for full-period (50 minute) lessons, and a nominal fee for use of practice pianos and organs. Orchestral and Band instruments are available for rental. NOTE: Beginners must take two consecutive terms of *Music 19* in order to receive academic credit.

20—1 The Nature of Music

- (6201) Five prepared class periods. This course is designed to give a general background in history, theory, and practical aspects of music. Music from its earliest sources to the present is examined. Also, the role of music and the arts in each of its cultural stages is studied. Students

receive some first hand experience with musical instruments. No previous experience in music is required.

HISTORY AND APPRECIATION

The Nature of Music (Music 20) is a **prerequisite** for all courses in this section.

26—123 Seminar in the History of Music

- (6261) Two class meetings. Open to Lower and Upper
(6262) Middlers and to Seniors. This course, taught in seminar fashion, is one where a great deal of reading, listening, and analysis is expected to take place outside the classroom. The composer or composers and era to be studied each term will be decided by the class and the instructor. (Sample topics: Beethoven and the Era of Revolution; The Life, Times and Music of J.S. Bach.) Hours to be arranged.

27—123 Independent Study in the History and

- (6271) Literature of Music
(6272) Four prepared class periods. Open to Upper
(6273) Middlers and Seniors. A student who has taken at least one trimester of *Music 26* may, with the permission of the instructor, pursue an independent course of study in either a particular type of music or a particular period of music.

28—1 Jazz

- (6281) Four prepared class periods. Open to Upper
28—2 Middlers and Seniors. A study of the history of
(6282) classic jazz, dating back to its roots in Africa, its development in New Orleans, its spreading to
28—3 New York and Chicago, and its influence on
(6283) music today. A survey of ragtime, blues, Dixie-

land, fox-trot, on through the big band era of the thirties, concluding with the jazz rock of today. A study of the influence and contributions of the major personalities such as W.C. Handy, Jelly Roll Morton, Louis Armstrong, Basie, Whiteman, Gershwin and the rest of the greats.

THEORY

32—123 Conducting

- (6321) Hours to be arranged. Open to Upper Middlers
(6322) and Seniors. A course in conducting and basic
(6323) musicianship. This course is designed to give the student an introduction to the conductor's world through developing conducting skills and score analysis.

33—1 Theory of Music I

- (6331) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course offers an introduction to harmonic progression, triads, modes, rhythmic coordination with dictation. Some original work is also expected.

34—2 Theory of Music II

- (6342) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Prerequisite:** *Theory of Music I* or permission of the instructor. This course deals with harmonic progressions, modulations, figure bass, and an introduction to counterpoint and harmonic analysis.

35—3 Theory of Music III

- (6353) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Prerequisite:** *Theory of Music II* or permission of the instructor. This course includes advance figure bass, more complex chords, and a brief introduction to nineteenth and twentieth century techniques.

36—1 Electronic Music

- (6361) Four prepared class periods. **Prerequisite:** *The Nature of Music (Music 20)* or permission of the
36—2 Department Chairman. A course for the benefit
(6362) of those who seek to expand their domains of
36—3 creativity by understanding and utilizing the
(6363) conceptual approaches inherent in electronic music synthesizers and related equipment. Using a practical approach, the course begins with the care and feeding of the tape recorder and proceeds to the functioning and operation of electronic music modules. A lab fee of \$15.00 is charged for the use of the synthesizer.

- 40—123 Advanced Techniques in Electronic Music**
 (6401) Four prepared class periods. **Prerequisite:** *Electronic Music* (Music 36). A course designed for
 (6402) the continuation of the skills and techniques
 (6403) developed in *Music 36*. A lab fee of \$15.00 is

charged for the use of the synthesizer.

Philosophy and Religious Studies

The department seeks to initiate students into three distinctive human quests: the search for meaning, the search for justice and the search for the foundation of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered at a variety of levels. All courses involve four prepared class periods.

The department diploma requirement is successful completion of any one-trimester course; this requirement applies only to those who attend Phillips Academy for three or four years, beginning with Juniors and Lowers who enter in September 1983.

20—3 The Biblical World View: An Introduction

- (7203) Four prepared class periods. Open to Juniors and Lower Middlers. Why was the world created?

Why are we humans placed on this earth? What are we like? What should we try to achieve in life? How should we treat one another, other creatures, and the planet on which we live? For many centuries the Bible provided for many people a response to such questions. In our day, however, the message has become both unclear and increasingly unfamiliar. In this course we shall look at the composition and the historical setting of the Bible (Old Testament), then read selected passages of Biblical narrative and reflection which introduce persons and principles central to the Biblical view of the world, its inhabitants, and its Creator. (Rabbi Gendler)

21—3 Introduction to Ethics: Discernment and Decision

- (7213) Four prepared class periods. Open to Juniors and Lower Middlers. Rooted in concrete issues and experiences of everyday living this course provides an introduction

to the skills of discernment. Drawing case studies from literary and topical sources, bioethics, law and education, the class will critically investigate the often unspoken presuppositions that give rise to moral decision. (Dr. Avery)

30—1 Introduction to Non-Western Religions

- (7301) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. This course

provides a brief introduction to four of the world's major religions: Islam, Hinduism, Buddhism, and Taoism. Huston Smith's classic, *The Religions of Man*, is the text. Additional readings are drawn from basic religious texts of the traditions. (Rabbi Gendler)

31—1 Portraits of Jesus: the New Testament

- (7311) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. Political activist, wonderworker misleading Israel, only-begotten Son of God, simple rabbi: who was Jesus of Nazareth? This course

provides a critical assessment of the different accounts of Jesus found in the New Testament and of the claims made about him. (Fr. Gross)

32—2 Post-Biblical Jewish Thought: Responses to the Holocaust

- (7322) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. An exploration of the holocaust through diaries, memoirs, works of fiction, poetry, and later reflections on the phenomenon.

Questions to be dealt with will include: what was it like for the victims? What was it like for the Nazis? How could it have happened? What elements from Jewish, Christian and secular tradition contributed to its possibility? What have been some of its effects on our own feelings about life and human beings? How have various Jewish, Christian, and secular thinkers responded to the challenge of this event? (Rabbi Gendler)

40—2 Understanding Religion: An Introduction

- (7402) Four prepared class periods. Open to Upper Middlers and Seniors and to Lower Middlers

with permission of Instructor. From Old Stone Age burial artifacts to the presence of the Guru Maharaji in the Houston Astrodome, people have tried to make sense out of their existence through religion. What is a religion? What aspects of the human experience does it address? Is it a response to the needs of the individual or of society? Or is it a response to something beyond man? The phenomenon of religion will be examined from the point of view of the person, the community and the transcendent. (Dr. Avery)

41—1 Views of Human Nature

(7411) Four prepared class hours. Open to Upper Mid-

41—2 dlers and Seniors, and to Lower Middlers with**(7412)** permission of Instructor. A critical examination of existentialism, psychology, biology, anthro-

pology and transcendentalism in light of the answers they provide to the following questions: Does man have a characteristic nature? What are his basic needs, rights, obligations and values? Is man free? Is man responsible for his actions? Given an understanding of man, how should we structure society to satisfy his needs and take advantage of his potentials? Readings: Jean-Paul Sartre, *Existentialism is a Humanism*; Sigmund Freud, *Civilization and Its Discontents*; B.F. Skinner, *Beyond Freedom and Dignity* and *Walden Two*; Richard Leakey, *Origins*; Sam Keen, *Apology for Wonder*. (Mr. Hodgson)

42—2 Bioethics**(7422)** Four prepared class periods. Open to Upper**42—3** Middlers and Seniors. The growth of the human**(7423)** sciences and their corresponding technologies has increased human control over and thus res-

ponsibility for the development of mankind. The course addresses particular issues of life and death, genetic engineering, behavior modification, human research and the allocation of medical resources. At the same time the underlying issue of the relationship between science and ethics is considered. (Dr. Avery)

43—1 Law and Morality**(7431)** Four prepared class periods. Open to Upper**43—3** Middlers and Seniors, and to Lower Middlers**(7433)** with permission of Instructor. A critical examination of an intricate web of problems which

arises out of the relationship between law and morality. Questions of concern include: Does society have the right to restrict the behavior of an individual? On what, if any, grounds are such restrictions justifiable? To what degree should society incorporate "popular" morality into law? Is an individual ever morally justified in breaking the law? If so, under what circumstances and in what fashion? Readings include selections from Plato, Hobbes, R.P. Wolff, Lord Patrick Devlin and Martin Luther King, Jr. Case studies on abortion, pornography, racial and sexual discrimination and civil disobedience. (Mr. Hodgson)

44—2 Nonviolence in Theory and Practice**(7442)** Four prepared class periods. Open to Upper

Middlers and Seniors. The militarily most de-

structive century in human history, our twentieth century, has also been one in which such men as Gandhi and Martin Luther King, Jr., have successfully applied nonviolence to

conflict situations. What is the theory of this approach to human conflict? What are some of its psychological assumptions? What is its religious and human significance? By what means does it operate? What are its prospects for the age ahead? We shall use case histories, the testimonies of those directly involved in such struggles, films, critical and theoretical studies in trying to clarify and comprehend some of these elements of nonviolence. Readings include Joan Bondurant's *The Conquest of Violence* as well as writings of Gandhi and King. (Rabbi Gendler)

45—2 Man's Search for Meaning**(7452)** Four prepared class periods. Open to all Upper**45—3** Middlers and Seniors and to Lower Middlers**(7453)** with permission of Instructor. The reflective person is confronted with questions that hun-

ger to be answered yet elude definitive, "objective" answers. The person's faith is often what sustains him/her and provides "subjective" answers to these fundamental questions. The issues of creation, of death, of evil, of identity, of purpose all challenge one's faith. This course (which takes its title from Victor Frankel's book) will consider these issues from a faith perspective using Scripture, literature (i.e. *Equus*, *No Exit*, *The Little Prince*, *The Shadowbox*, *Man's Search for Meaning*, *I Heard the Owl Call My Name*, etc.), and other materials. The course will encourage self-reflection and regular attendance is essential. (Fr. Gross)

46—2 Proof and Persuasion**(7462)** Four prepared class periods. Open to Upper**46—3** Middlers and Seniors, and to Lower Middlers**(7463)** with permission of instructor. A practical introduction to informal logic and to the philosophical

study of language. Some of the questions raised are: What is the difference between a good argument and a poor one? What are the common fallacies of thought? What are the limitations of logic? What is the meaning of "meaning" and the truth about "truth"? The course stresses the development of individual skills in argument and includes a critical examination of the patterns of thought one encounters every day in magazines, newspapers and on television. (Mr. Hodgson)

50—2 Existentialism**(7502)** Four prepared class periods. Open to Upper Middlers and Seniors. The term "existential-

ism" covers a broad range of attitudes and values that are joined together by an emphasis on human existence. The authors brought together in its name share a characteristic concern for the problems of meaning, identity and choice that confront men and women in everyday life. The lectures, discussions and readings are designed to help us locate and express these problems as they confront each of us in our

own lives and to assist in understanding and resolving them by drawing on the experiences and insights of the major existentialist thinkers. Readings: Nikos Kazantzakis, *Zorba the Greek*; Friedrich Nietzsche, *The Genealogy of Morals*; Jean-Paul Sartre, *No Exit* and *Being and Nothingness*; Martin Heidegger, *What is Philosophy*; Søren Kierkegaard, *The Sickness unto Death*; Martin Buber, *I and Thou*. (Mr. Hodgson)

- 51—2 **In Search of Justice: from Socrates to Marx**
(7512) Four prepared class periods. Open to Upper
- 51—3 Middlers and Seniors. God, emotion, logic, social necessity and economic laws have all been invoked as the final arbiter of justice. The class

will examine the major answers to the problem developed by Plato, Aristotle, Kant, Mill, Marx and others. The course aims to assist critical awareness of the ultimate criteria of one's own evaluations and those of others so that she/he be better equipped to make her/his own contribution to the never-ending search for justice. (Dr. Avery)

- 52—1 **Great Philosophers: Knowledge and Reality**
(7521) Four prepared class periods. Open to Upper
- 52—3 Middlers and Seniors. The great philosophers offer us a variety of serious and systematic

attempts to answer a set of difficult questions that perennially face mankind: What is the good life? What are the sources of human experience? What is the relationship between my mind and my body? Does God exist? What is the relationship between reason and reality? This course critically evaluates the responses of Plato, Aristotle, Descartes, Hobbes, Berkeley, Hume, Kant and Mill in an attempt to show the continuing importance of both the questions and their answers. (Mr. Hodgson)

Physical Education

All Juniors and new Loweres are required to elect one trimester of *P.E. 10* in addition to their regular athletic commitment.

- 10—1 **Physical Education**
(9201) Pass/Fail. Limit of 15 students per section. Five
- 10—2 class periods per week. A course integrating
- (9202) health and fitness concepts with self-testing and
- 10—3 challenge activities; two class periods per week
- (9203) are spent using the running track, weight room,

ropes course and other areas of the athletic complex. Two class periods are devoted to drown-proofing survival swim technique and C.P.R. training. One period per week is lecture-discussion, requiring some outside reading or other preparation. If the course is failed, the student will repeat it, in full or in part, during a subsequent term.

Psychology

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strategies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained. We also offer courses listed under Interdisciplinary and English. These courses are: *Basic Study Skills*, *Language Skills*, and *Efficient Reading*.

- 32—1 **Introductory Psychology**
(7021) One double period and two prepared class
- 32—2 periods; for Uppers and Seniors. A survey
- (7022) course designed to introduce the student to the
- 32—3 complexity and diversity of psychological inquiry. Emphasis is placed on the application of
- (7023) basic psychological principles to individual ex-

perience in order to expand awareness of both self and others. In addition, the broader implications of psychological findings for an integrated understanding of human development and behavior are considered. Topics to be covered include: psychoanalytic, behavioral and humanistic theories of the person, psychosocial, cognitive and moral development, human motivation and personality, abnormal behavior and dreams. Lectures are designed to catalyze discussion. A combination of objective examinations and individualized writing assignments are utilized to evaluate the student's learning.

33—1 Human Sexuality

- (7031) Two double class periods. An interdisciplinary course for Uppers and Seniors, designed to help students understand the facts of sexuality from the biological, social, psychological and spiritual points of view. While there is sometimes a tendency to separate mind from body, the perspective of the course is that mind, body, soul and psyche are all involved in sexuality, often in complex and mysterious ways. In addition to the biological facts, topics to be covered include misconceptions and mythologies of sexual growth and development, masculine and feminine psychology, varieties of intimate relationships and variations in sexual life styles. There is a strong emphasis on discussion in class and self-reflection. In addition, the format of the course includes readings, films, case analysis, quizzes and a final paper.

(7032) students understand the facts of sexuality from the biological, social, psychological and spiritual points of view. While there is sometimes a tendency to separate mind from body, the perspective of the course is that mind, body, soul and psyche are all involved in sexuality, often in complex and mysterious ways. In addition to the biological facts, topics to be covered include misconceptions and mythologies of sexual growth and development, masculine and feminine psychology, varieties of intimate relationships and variations in sexual life styles. There is a strong emphasis on discussion in class and self-reflection. In addition, the format of the course includes readings, films, case analysis, quizzes and a final paper.

40—2 Human Relationships

- (7102) One double period and two prepared class periods; for Uppers and Seniors. **Prerequisite:** one previous psychology course, or consent of instructor. The many dimensions of human relationships are explored. Emphasis is placed on assisting the student to articulate his or her emerging psychological awareness of personal and social relationships. Primary source readings and structured experiential exercises are used to develop an understanding of psychological concepts as rooted in individual experience. Topics to be considered include: core human conflicts, characteristics of the healthy individual in relationship to others, how power, body language and family communication styles shape relationships, and the impact of social structures on intimate relationships.

(7103) one previous psychology course, or consent of instructor. The many dimensions of human relationships are explored. Emphasis is placed on assisting the student to articulate his or her emerging psychological awareness of personal and social relationships. Primary source readings and structured experiential exercises are used to develop an understanding of psychological concepts as rooted in individual experience. Topics to be considered include: core human conflicts, characteristics of the healthy individual in relationship to others, how power, body language and family communication styles shape relationships, and the impact of social structures on intimate relationships.

42—2 Group Theory and Process

- (7122) Two double periods. For Uppers and Seniors. Pass/Fail. Limit of fifteen students per section. **Prerequisite:** at least one previous psychology course. This is a course in Social Psychology. Its topic for study is human behavior in small groups. Human beings do most of their living, working and playing in small groups ranging in formality from family to classroom

groups ranging in formality from family to classroom

groups. The relationships among the members of these groups develop through similar stages and by common processes which determine to an important extent the effectiveness of the group in achieving its goals. These stages and processes are a response to two basic human needs: the need for belonging and community, on the one hand, and the need for separateness and individual identity, on the other. The classroom group provides students with a laboratory in which to experience and observe group process. Students read articles in the professional literature and write papers on topics that reflect upon their learning.

Science

Since Andover students arrive with various levels of experience in science there are courses offered in biology, chemistry and physics at several degrees of sophistication. The courses are arranged so that a single course may be taken in any of the three major fields at a level appropriate to the aptitude of the student, or several courses of increasing difficulty may be taken should some degree of specialization be desirable for certain students. There are also available introductory science courses (*Science 10-17*) for Lower and Juniors and some other specialized courses in geology, astronomy and energy (*Science 30-35*) for Uppers and Seniors.

In general, students are encouraged to take a variety of courses in physical and biological science and not to specialize in a single branch of science. For students with special interests, individual project work for credit is open to Seniors on a pass/fail basis and is arranged through the office of the Dean of Studies.

Although a single laboratory course in biology, chemistry or physics at the 20 level or above prepares the student for the College Board in that subject and meets the diploma requirement in science, students are encouraged to take more courses in science to broaden their base of scientific awareness and so as not to eliminate career options too early. Courses at the 50 level prepare students for the Advanced Placement examinations offered each spring by the College Entrance Examination Board.

SCIENCE

Science Introductory Physical Science (IPS)

10—0 Open to Juniors and Lower. Five class periods.

(8000) A laboratory course in beginning physical science using an expanded version of a syllabus

called "Introductory Physical Science." Students explore the nature of matter in its solid, liquid, and gaseous forms. Analyses of mixtures and compounds, and a study of radioactivity lead to an atomic concept of matter. Many experiments are quantitative and require careful recording of data, drawing of graphs, and calculations of results.

Science Chemistry for the Biological Sciences

11—3 Open to Juniors and Lower. Four prepared

(8013) periods per week. This course is designed for

students who have no background in chemistry and are planning to take *Biology 30*. Topics such as acid-base chemistry, bonding, shapes of molecules, the mole concept, and elementary organic chemistry will be covered. There will be laboratory work.

Science Introduction to the Geosciences

12—2 Open only to Juniors. Four prepared class

(8022) periods. Laboratory work is accomplished during

class periods and involves study of satellite and aerial photos, slides, maps and various specimens. Typical areas of study include volcanoes, fossils, earth resources, oceans, gemstones, crystals and earthquakes.

Science Introduction to Energy

14—1 Open to Juniors and Lower. Four prepared

(8041) class periods. This course concentrates on hydroelectric, fossil, nuclear and solar energy, but

there is some study of geothermal, wind, batteries and house construction. Certain environmental problems will be included. Some laboratory work is accomplished during various class periods.

Science Oceanography

15—1 Four prepared class periods. This is an introductory

(8051) science course designed primarily for

Juniors and Lower who have not taken *Biology 25* or *30* or their equivalent. The 70% of our earth's surface comprising the oceans is examined from a number of physical, chemical, and biological perspectives. Accordingly, we investigate aspects of sea water chemistry, mechanisms of wave propagation and current generation, and interactions among the thousands of living organisms found in or near the sea. Films and slides complement the classroom portion of the course.

Science Ecology

16—3 Four prepared class periods. Open to Juniors

(8063) and Lower Middlers. The course is designed to

introduce students to the basic concepts of ecology. The material offered explores the meaning of interdependence and interrelationships within environment; population dynamics; trophic levels and energy; adaptation; succession; and the impact of man upon his environment and some of the problems caused by his use and abuse of basic resources. Class material is coordinated with and reinforced by laboratory studies of population growth, computer programs to study environmental problems and pertinent field trips. One of the major objectives of the course is to develop within the student an understanding of and sensitivity to the balance and beauty of nature.

Science Introduction to Zoology

17—2 Four prepared classes per week, one of which

(8072) will be used for laboratory work. This is a one-

term course designed for Juniors and Lower who have not taken *Biology 25* or *30* or their equivalent. A study will be made of the similarities and differences among the major animal divisions from the most primitive invertebrates to the most complex vertebrates. Areas of concentration will include the basic systems of each phylum (*i.e.*, digestion and reproduction), as well as the ecological role and the evolutionary development of the organism. Lab periods will be used to develop techniques of dissection while studying the anatomy of animals from selected phyla.

Science Energy and the Future

30—2 Four prepared class periods. Open to Uppers

(8502) and Seniors who have either completed or are

completing the science requirement, but not open to students who have had *Science 14*. Its purpose is to study energy in a modern biological, geological, physical-chemical and social context. While several fundamental aspects of science and energy are inspected, time is devoted to issues that transcend mere technology. The course of study considers fossil fuels, nuclear, solar, geothermal, wind, tidal, and other sources of energy, biological and ecological aspects of energy, public health, risks, costs, governmental policies and programs. The intent is that through the unifying theme of Energy, students can grasp a broader understanding of their world, as well as perhaps a further glimpse into the present and future of man. A research paper is required.

Science Observational Astronomy

31—1 Four class periods. Astronomy is one of the few sciences left that the amateur can enjoy while
(8511) still making meaningful contributions to the
31—3 field. This course exposes students to observing
(8513) the heavens with the unaided eye, binoculars, and telescopes. Classes are scheduled in the Observatory as weather permits. Students identify constellations, track asteroids and planets, and learn how to observe using a telescope. Students are encouraged to bring cameras, binoculars or other optical equipment they own. Sections are limited to 12 students.

Science Astronomy—The Universe Beyond the Solar System

32—2 Four prepared class periods. This course is designed for Uppers and Seniors who are interested in a college-level course in modern astronomy. We shall consider some of the most fantastic objects in the known universe, such as quasars, pulsars, and black holes. In addition we shall discuss the theories which describe these objects: theories that analyze the evolution of stars, the formation of the universe, the implications of relativity for space travel, and the search for extraterrestrial intelligence (ETI). The course will be made up of slide presentations, films, discussions and sessions in the Observatory.

Science Electronics

33—3 Four class periods per week. Prerequisite: previous completion of or concurrent enrollment in a Physics course, enrollment in at least *Math 30*, and permission of the instructor. A course in modern solid state linear and digital electronics leading to a fundamental understanding of microcomputer hardware through consideration of circuit elements and their combinations, operational amplifiers, various types of diodes and transistors, integrated circuits, and Boolean algebra and its implementations. There will be considerable laboratory work.

Science Geology

34—3 Four prepared class periods, with two periods each week used for laboratory work. A general introduction to physical geology, with special attention given to socially significant aspects of this science, e.g., mineral resources, groundwater budgets, petroleum exploration, nuclear waste disposal, geothermal energy. Text: *Earth's Dynamic Systems*, Hamblin. Lab Manual: *Physical Geology*, Hamblin.

For another science-related course see Social Science 320 (Food and Hunger in Developing Countries).

BIOLOGY

The Biology department offers two year-long introductory level courses, each of which satisfies the diploma requirement for a laboratory science. Each course meets four times a week for 3 classroom periods and one double-period laboratory session which includes training in the use of the compound and stereoscopic microscopes and other laboratory equipment. Laboratory work requires careful observation, mastery of techniques and accurate recording and interpretation of results. Part of the spring term is set aside for work on individual or group laboratory projects. Juniors who wish to enroll in either *Biology 25—0* or *Biology 30—0* MUST obtain permission from the Department Chairman.

A student entering Phillips Academy as a Lower, Upper, or Senior who wishes to receive credit for and exemption on the strength of a course taken in the 9th grade at another school may do so upon passing a validation test to be administered after the student arrives at Andover.

25—0 Biology

(8100) This course is intended primarily for Lower Middlers with little previous exposure to science. A topics approach usually centered around laboratory experiences is employed in order to acquaint students not only with fundamental biological principles but also with the methods and techniques used to elucidate them. Attention is paid to the processes by which scientific evidence is gathered, interpreted, and summarized. (This course is not open to Seniors.)

30—0 Biology

(8110) This is a survey course for those students with previous exposure to some of the basic principles of science. It stresses the unity of life, rather than the diversity, by emphasizing the functions common to all living things. It covers, in plants, animals, and microorganisms, the fundamental principles of metabolism (including nutrition, gas exchange, materials transport, excretion, and homeostasis), responsiveness and coordination, reproduction and development, genetics, evolution and ecology.

The following four term-contained courses are designed for those students who would like to take biology beyond the 25 or 30 level. For those students who wish to take the Advanced Placement Examination, we recommend taking *Biology 41, 43, and 44*. (A year of

Chemistry and/or Physics is also strongly recommended.) These courses, however, are not designed exclusively for students who wish to take the biology A.P. Exam. *Biology 25* or *30* or their equivalent is required for all 40-level Biology courses.

✓ 41—1 **Evolution, Genetics, and Ecology**

(8131) Three class periods and one double laboratory period. The major unifying theme in the study of biology is that all life has evolved from a common ancestor. This course will discuss the ideas of the pre-evolutionists, Darwin, and the neo-Darwinists. The mechanism of natural selection will then serve as a foundation for the discussion of the basic concepts of ecology such as the ecosystem, energy flow, succession, and relationships between populations. Problems of societal concern such as environmental ethics and our altering of our own evolution will also be discussed. A project or a research paper will be required.

42—1 **Animal Behavior**

(8141) Three class periods and one double laboratory period. The course is designed to familiarize the student with the basic principles of animal social behavior. The topics which receive the greatest emphasis are: territoriality, altruism, mating strategies, courtship, parental behavior, migration, dominance, and the evolution of behavior patterns. Each student is given a newly hatched chick or duck to demonstrate the phenomenon of imprinting. Later, animals will be trained, by operant conditioning, to perform simple tasks. Throughout the course, an effort is made to relate the behavior of animals to the behavior of humans. A project or a research paper will be required.

43—1 **Molecular Biology**

(8151) Five prepared classes per week. Following a brief review of chemical principles, the course examines the major classes of biomolecules and how they are synthesized and degraded in the cell. Particular emphasis is placed on those reactions which are associated with energy conversion pathways such as respiration and photosynthesis. Enzyme function is considered both in terms of mechanisms of action and with regard to kinetics. The relationship between structure and function at the molecular level is emphasized in studies of the plasma membrane, gene interaction, and control of genetic expression.

✓ 44—2 **Human Physiology**

(8162) Five prepared classes per week. An in-depth consideration of the major systems of the human body. All lab work will be done during a two-week period, devoted solely to the dissection of a cat (or rabbit) and to microscopic slide study of the major tissues of the human body. A fully documented research paper will be required. Text: *The Mechanisms of Body Functions*, By Vander, Sherman & Luciano.

CHEMISTRY

25—0 **Elementary Introductory Chemistry**

(8210) **Prerequisite:** Completion of *Mathematics 10* or the equivalent. For Lower Middlers and Upper Middlers. Three recitation periods and one double laboratory period. The course includes a systematic study of matter and the changes it undergoes. Emphasis is placed on the reasoning involved in the development of modern theory and general concepts rather than memorization of descriptive chemistry. Laboratory work is closely related to topics covered in recitation.

30—0 **Introductory Chemistry**

(8220) **Prerequisite:** Completion of *Mathematics 20* or the equivalent. Three recitation periods and one double laboratory period. The course is designed for students with more maturity and mathematical background than those taking *Chemistry 25*. As in that course, the modern theoretical framework of chemistry is emphasized, and the laboratory work is closely related to topics covered in recitation. These topics are treated in greater depth and with more emphasis on quantitative rather than qualitative answers.

42—2 **Research in Chemistry**

(8232) **Prerequisite:** At least *Chemistry 25* or *Chemistry 30* completed with distinction, and permission of the instructor. One prepared period and three unprepared, double laboratory periods, or the equivalent. Each student selects a research project in consultation with the instructor and then carries out the necessary work. (Dr. Minné)

43—3 **Elementary Organic Chemistry**

(8243) **Prerequisite:** Completion of either *Chemistry 25* or *30*. Three recitation periods, and one double laboratory period. Students interested in medical or biological fields or in additional chemistry must generally wait until the college sophomore year before studying organic chemistry, the chemistry of carbon compounds. This course is a prior introduction to this critically important and fascinating subject.

Organic chemistry is largely non-mathematical and descriptive in nature. Students will use a condensed "mini-course" text, learn many of the laboratory techniques unique to organic chemistry, make use of three-dimensional plastic molecular models, and gain a sound background in nomenclature, functional groups, bonding, simple mechanisms, typical reactions, and infra-red spectra. (Dr. Wilson)

44—1 Stereochemistry

(8251) **Prerequisite:** Completion of *Chemistry 25* or the equivalent. Three recitation periods and two double laboratory periods. For students who wish to learn more chemistry without aiming for advanced placement. This course is an introduction to stereochemistry, the study of the symmetry and shapes of organic and inorganic molecules. In the classroom an historical approach will show how the chemists of the last century (Pasteur, Kekule, Van't Hoff, and Fischer) were able to deduce the shapes of molecules in a simple, understandable way, long before atomic orbitals and electronic theories were dreamed of. The course will also show how modern electronic theory has been adapted to agree with the shapes which the older chemists had already established. The laboratory program is a comprehensive series of related experiments involving synthesis and analysis and finally illustrating the importance of stereochemistry to living organisms. (Dr. Rees)

52—23 Advanced Placement Chemistry (T2) (a two-term commitment)

Prerequisites: *Chemistry 25* or *Chemistry 30* completed with distinction and a year of physics, which may be taken concurrently. Four recitation periods and one double laboratory period. The course is for students who wish to prepare for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

55—0 Honors Introductory Chemistry—Advanced Placement

(8280) **Prerequisite:** One year of physics. Three periods for recitation and two double laboratory periods. This course is open to a limited number of able students, by invitation, who have strong scholastic records in mathematics and physics. No prior course in chemistry is expected. It is essentially the equivalent of a first-year college course, and prepares students for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

PHYSICS

20—0 Physics Honors for Juniors

(8300) Four prepared class periods. **Co-requisite:** Registration in *Math 19* or *Math 20*. This is an honors

course for talented Juniors with a strong interest and background in science and mathematics. Students entering this course should have *mastered* a year of algebra as it is used profusely in solving word problems. There is laboratory work. Successful completion of this course prepares students for *Physics 55*. The text is *Physics* from the Physical Science Study Committee.

25—0 Physics

(8310) Five class periods, one unprepared. Open primarily to Lower Middlers. An introductory course in the basic concepts of physics. A less rigorous course than *Physics 30*, it is designed for students with latent mathematical maturity. Students should have completed one year of algebra before enrolling. Successful completion of the course prepares the student for the College Board Achievement Test in Physics.

30—1 College Physics

(8321) Five class periods. **Co-requisite:** Registration in at least *Mathematics 30* or its equivalent. A non-calculus, B-level Advanced Placement physics course for students with ability in mathematics and science, this first term is a study of classical mechanics (including rotational dynamics and physical pendula), with extensive laboratory work an integral part of the course. *Physics 30—1* (or equivalent) is a **prerequisite** for *Physics 30—23* (T2). Text: *College Physics*, by Franklin Miller.

30—23 College Physics (T2) (a two-term commitment)

(8325) **Prerequisite:** *Physics 30—1*. Five class periods. Wave motion, heat, kinetic molecular theory, thermodynamics and electrostatics in Winter Term. Electrodynamics (including magnetism), geometrical and physical optics, early atomic and nuclear theory in the Spring Term.

52—12 Advanced Physics (T2) (a two-term commitment)

(8374) Five class periods. **Prerequisite:** An honor grade in *Physics 30* or its equivalent and enrollment in at least *Math 51* or its equivalent. This is a rigorous course in mechanics (fall term) and electro-statics and dynamics (winter term). Calculus will be used as required. This course generally prepares candidates for the C-level Advanced Placement Examination in Physics and entrance to honor level programs in physics at the university level. Text: *Physics*, by Resnick and Halliday.

55—0 Physics Honors

(8380) Four prepared class periods and one double laboratory period. Open to talented students

who will be enrolled in at least *Math 51*, may have taken a chemistry course and need not have taken any previous physics. If you are interested in this course, you may sign up for it with your academic advisor in the spring or you may request it on your course registration form. The department chairperson will then review your credentials and invite you to join the course or suggest your enroll in *Physics 30*. *Physics 55* prepares students for the C-level Advanced Placement Examination and is a rigorous course emphasizing mechanics and electro-statics and dynamics. Text: *Physics* by Resnick and Halliday.

60—3 Relativity and Quantum Mechanics

(8393) Prerequisites: *Physics 30* and *Math 52*. Four prepared class periods. Relativity and Quantum Mechanics are two theories that completely revolutionized man's thinking about the universe. The course is a survey of the basic ideas underlying these theories. Special mathematical techniques needed for a better understanding of the material are developed in the course.

Theatre and Dance

All courses are electives, open to the various classes as noted. Courses in theatre are designed for students who wish formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work in productions. A variety of experiences is available: some courses result in performance; some courses study theory; some do both. Theatre students are encouraged, though not required, to supplement their classwork by participating in any of the numerous productions mounted each year, or they might be invited to join the Andover Touring Company, which for several years has become part of an exchange program with schools in England, touring with *Our Town*, *The Fantasticks*, *Scenes from American Life*, *A Thurber Carnival*, *Godspell*, *The Contrast*, and *J.B.*

THEATRE COURSES

20—2 Introduction to Theatre

(6502) Four class periods. Open to Juniors and Lower
20—3 Middlers. Using both classical and modern
(6503) scripts to provide a range of dramatic experiences, the class studies plays in depth to see

how they might proceed from page to stage. The course examines the components of production, especially acting, set design, and lighting, to learn how the play moves from the script to full realization as a production. Intended for students with limited experience in educational theatre.

21—1 Introduction to Acting

(6511) Four class periods and one hour of movement.
21—2 Not open to Juniors. This course is designed for
(6512) students with little or no acting experience. By
21—3 doing exercises in movement and voice produc-
(6513) tion, reading, improvisation, and scenes, a student who is curious about the theatre may determine whether he or she has ability or interest in acting, while learning something of the process of characterization, the major responsibility of the actor. The emphasis is on the variety of acting experiences rather than on a polished final product. One required trip to a nearby theatre. Text: Hagen, *Respect for Acting*.

22—1 Public Speaking

(6521) Four class periods. Not open to Juniors. The
22—2 course has a dual objective: to learn how to
(6522) speak easily in front of others, and to learn how
22—3 to speak English well. Students give prepared
(6523) and extemporaneous speeches on a variety of topics while studying diction, pronunciation, projection, organization, and other techniques of good speaking.

26—123 Technical Theatre

(6561) Two double periods. Open to all classes.
(6562) Through practical experience in designing,
(6563) building, and lighting for plays currently being produced, students learn the elements of stagecraft, including set construction, stage rigging, and the use of lighting instruments and gels. For the Fall Trimester emphasis will be on set design; for the Winter, stagecraft; and for the Spring, lighting.

28—1 Shakespearean Workshop

(6581) Four class periods. Open to all classes. An intensive study of several plays by Shakespeare, with the major emphasis on the spoken word. Close attention is given to pronunciation, diction, rhythm, dynamics, and interpretation. Students read aloud, act, memorize, and record scenes and soliloquies. Anyone who plans to audition for *Theatre 52—2* might consider this course.

32—2 Intermediate Acting(6622) Four class periods. **Prerequisite:** *Theatre 21*, or**32—3** departmental permission. Building upon the(6623) principles of acting introduced in *Theatre 21*, this intermediate acting course consists of de-

tailed scene work and improvisation, exploring the relationship of the actor to his audience and to his fellow actors and focusing on the creation of dramatic moments, both with and without scripts. The course considers various acting styles, in an effort to guide the actor toward a greater understanding of his responsibility on stage: to see to what degree he can remove himself from himself while creating truthful characterizations.

33—3 Oral Interpretation(6633) Four class periods. **Prerequisite:** *Theatre 21* or *22* or departmental permission. Designed to con-

tinue the principles of effective speaking begun in either *Theatre 21* or *22*, the course examines the "voices" of poetry, prose, and drama both in established literary texts and in original student writing, giving students an opportunity to "hear" literature as well as to read it, in an effort to learn more of the relationship between the creative act of the writer and the reader's interpretation. Oral interpretation brings the student closer to text, character, and author by developing "a sense of the other," an understanding of literature as a collaboration between writer and reader. While some written analysis would be expected, the emphasis will be upon oral presentation.

51—1 Acting and Directing Workshop(6711) Two double periods. **Prerequisite:** *Theatre 21* or *32*, or departmental permission. Uppers and

Seniors only. The course serves two kinds of students: those who wish as actors to study plays and characters in greater depth and those who wish to study the principles and techniques of directing, the most complex of theatrical tasks. While everyone will do some acting, only those people who express a desire to experiment with directing will do so. Class members work with manageable scenes from classical and contemporary periods, reading theories of acting and directing, studying various performance styles, and examining methods of scene interpretation.

52—23 Play Production

(6722) Four double periods. Uppers and Seniors only.

(6723) By audition. This course is oriented toward the performance of a significant work by an important playwright. Recent choices have been *The Crucible*, *The Sea Gull*, *The Little Foxes*, *Macbeth*, and *As You Like It*. Winter Term: *Henry IV, Part 1*. Spring Term: To be announced.

53—2 Playwriting

(6732) Four class periods. Open to Uppers and Seniors. Each student is expected to write at

least one one-act play in addition to certain exercises in monologue, dialogue, and scene setting. The class reads aloud from students' work-in-progress while studying the formal elements in plays by important playwrights and by reading selected literary criticism focused on drama.

DANCE**25—123 Introduction to Dance**

(6801) Four prepared class periods. Open to all classes.

(6802) A formal course in movement and composition

(6803) which introduces the serious student to the vocabulary and other elements of dance through active participation. The emphasis is not ultimately on public performance, but on the process and the discipline of modern dance. (Ms. Brecher)

Phillips Academy
Andover, Massachusetts 01810

Andover

Catalog 1983-84



The material in this catalog is intended to provide general information concerning Phillips Academy, Andover, rather than a complete record of any one year. It is not in any manner contractually binding, and the information herein is subject to revision and change.

Andover

Catalog



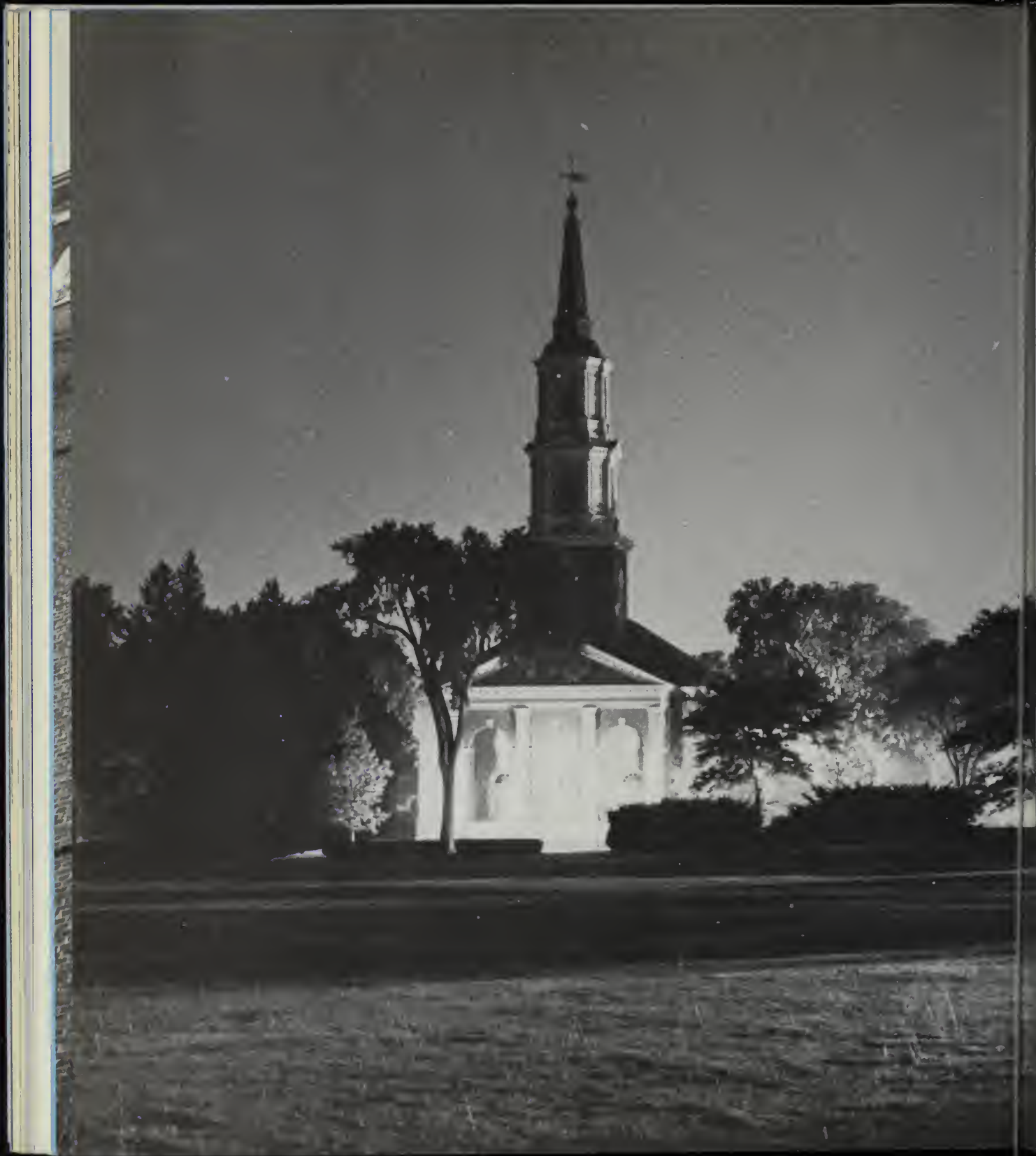
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Phillips Academy,
Andover, Massachusetts,
better known as Andover,
is an independent,
coeducational, integrated
and non-sectarian
institution offering a
variety of academic
programs for high school
students.

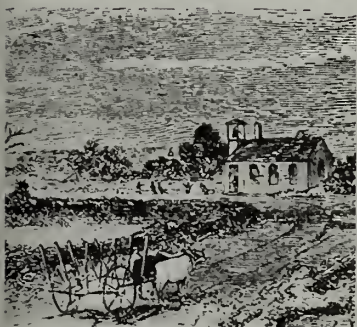


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Introduction to Andover



Phillips Academy in 1778

In 1789 the first scholarship monies are recorded, from John Phillips, "in consideration of further promoting the virtuous and pious education of Youth, (poor children of genius and of serious disposition especially) in Phillips Academy, founded in Andover, Massachusetts."

When Phillips Academy opened in 1778, midway through the American Revolution, there was little reason to feel that the future held bright promise. The war with England was going badly. There was as yet no stable government for the new American nation, nor any surety that stability and social order would return after the revolution. Yet these very dangers convinced twenty-six-year-old Samuel Phillips, Jr. that just such a venture as the Phillips School was required to educate wise and pious leaders for the new nation. For, as he wrote: "Upon the sound education of children depend the comfort or grief of parents, the welfare or disorder of the community, the glory or ruin of the state." Young Phillips (who also was making gunpowder for Washington's army) convinced relatives and friends to put up money and land, and he drafted the Constitution for a school to train the minds and morals of youth for leadership and service. It was to be a sturdily democratic school, for the Founders set this mandate in the Constitution: "This Seminary shall be ever equally open to youth, of requisite qualifications, from every quarter." On April 30, 1778, thirteen pupils met Master Eliphalet Pearson in a refitted carpenter's shop on our Andover campus. Phillips Academy had begun.

Andover today has grown from thirteen boys to twelve hundred boys and girls, from one rude shed to a campus of many acres where extraordinary modern facilities mix with school buildings more than one hundred and fifty years old. Yet the educational values of Andover, even its governance, remain strikingly close to those set forth by the founders. The insistence on academic excellence and moral education, and a diverse student body drawn from able "youth from every quarter," are ideas as appropriate today as in the Revolutionary age in which they were conceived.

In 1973 neighboring Abbot Academy, (est. 1829), one of the nation's oldest and most distinguished girls' boarding schools, was merged with Phillips. After nearly two hundred and one hundred fifty years, respectively, of single-sex education, the two historically linked academies joined their adjacent campuses and educational strengths to effect a single coeduca-

tional academy. The gratifying success of the decade of coeducation, and during that time the Academy's 200th birthday celebration, have made Andover and its academic program known to an increasingly widespread public.

We serve some two thousand young people, most between fifteen and eighteen years of age, at the Academy during the course of a calendar year. Some twelve hundred students are at Andover during the traditional school term for periods up to four years. Over eight hundred more spend the summer with us in the Andover Summer Session or various programs and institutes under its umbrella. While the students in our day are drawn from a narrower age group than earlier — Eliphalet Pearson faced both a six-year-old and a thirty-year-old in his first class in April of 1778 — their hopes and worries, many of the decisions they face, even their pranks, are timeless.

It should be a privilege to attend Andover, but Andover should not be a school of privilege. We are committed to enrolling able students from all economic levels, from every racial, religious and ethnic entity, "from every quarter" of American life, and from foreign lands. Our *Constitution* bids us do this. Andover is no single group's sanctuary. In a day when many Americans, by their actions, are rejecting even the ideology of the melting pot, we assert it.

Andover is a residential school, a twenty-four-hour learning community. This allows us to draw young people from across neighborhood lines, across state and national boundaries. Young people learn from peers as much as from teachers, particularly in a setting where there is no disjuncture between classroom and street, between school and home. Class, racial, religious and geographic diversity enrich a school and bridge over the divisions that rend national and international life. We presume to forward the learning of leaders here, and leaders in our day must understand racial, social, national and religious differences, and see for themselves how significant is the unity in humanity.

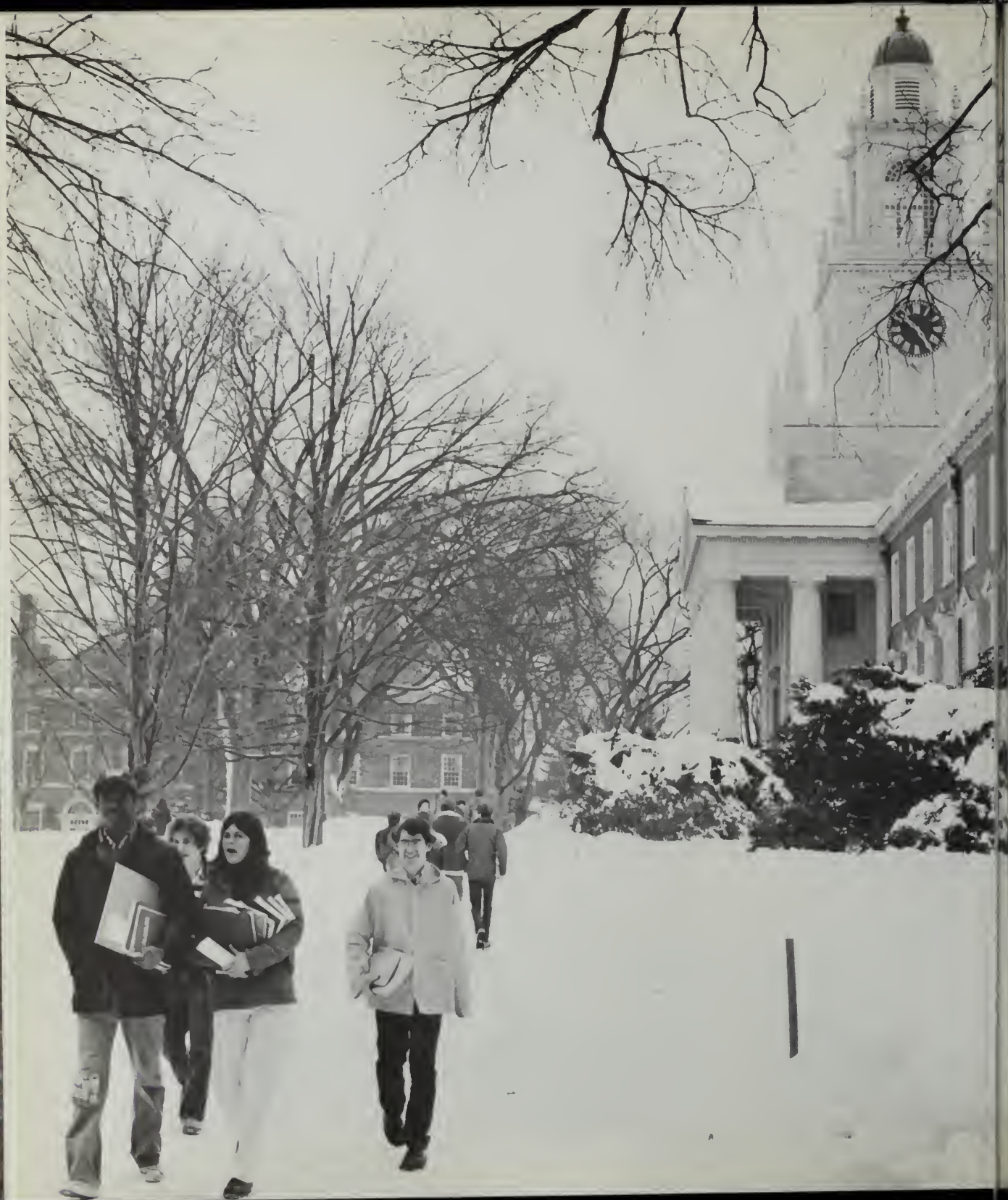
Andover is well equipped to provide for students whose interests and abilities are primarily in the academic realm, in the traditional liberal curriculum. We believe that the core of this tradition is sound. When taught with high expectations and global perspective, this liberal arts core provides the basis for public and moral leadership.

In a school the principal means to achieve these ends are decent, free and talented teachers. Andover's teachers are strong personalities, individuals of energy and well-considered values, instructors whose work is in the classroom, and also on the playing field, in the dormitory, in the dining hall — in short, across the full range of places where both adult and young person meet. American education is moving

away from such a model of teacher. In the mistaken belief that "efficiency" will result, teaching is broken into mechanistic bits. Andover makes a stand for the other, older tradition, for whole teachers who are concerned about whole pupils, their struggles and joys, their bodies and souls as well as their brains.

The adolescent years are the crucial time for success in education, those years when young people learn much about themselves, establish their personal goals and visions for the future, and build the courage to lead, to march to the tune of a different drummer. Now we at schools are educating the leaders for the 21st century. We must help them achieve the habits of excellence, broad understanding and a commitment to service. Like the founders of this school, we take youth, and adolescent education, seriously. For as they wrote in our school Constitution more than two hundred years ago: "Youth is the important period, on the improvement or neglect of which depend the most important consequences to individuals themselves and the community." For the young people who join our Andover school community, we want it to be a challenging, constructive and joyful experience.





Andover Life

A Beginning



In 1782 Paul Revere was commissioned to make the Phillips Academy seal. Revere engraved the educational faith of Andover's founders — "The end depends upon the beginning" — around the symbols of the rising sun and the hive of industrious bees. The founders' religious and patriotic commitment to the common good is symbolized by the second motto, "Non sibi" — "not for one's self."

A Purpose

Phillips Academy opened for instruction shortly before the Continental Army marched out of Valley Forge and, in one sense, the school and the nation have grown up together. Paul Revere engraved Andover's seal; John Hancock signed its Act of Incorporation, and George Washington sent his nephews here to study. Samuel F. B. Morse and Oliver Wendell Holmes were students of Principal John Adams. Harriet Beecher Stowe lived and worked at Andover; she is buried in the Academy cemetery, and her home is now a dormitory. "America" was written on Andover Hill in 1832. For over two centuries we have sought to develop sound scholarship, character and self-reliance in our students, as well as a commitment to work for the good of the nation and mankind.

If you come to Andover today, you won't have to go far to see a building designed by Charles Bulfinch or one named for Nathan Hale. You will take classes in a modern arts and communications center, an archaeology museum and in buildings dating back to the War of 1812. You might live in a dormitory constructed in 1808 or one built in 1973. Your next door neighbor might be from Texas or the People's Republic of China. You might take Greek and advanced computer programming, or Russian and astronomy. You might learn how to play squash, discover what it's like to work for a radio station or how to run rapids in a kayak or canoe.

The opportunities are here.

The Phillips Academy faculty, meeting in the winter of 1979, adopted the following as a statement of goals and intentions:

Phillips Academy is committed to providing a rigorous academic education for qualified "youth from every quarter," as stipulated by our Constitution, and to helping students develop the skills and values necessary for personal fulfillment and a significant contribution to society. The Academy strives to meet this commitment in several ways: recruiting aggressively and welcoming qualified and prom-

Always speak to an Andover man on the street, whether you know him or not. All cheering is under the direction of the cheerleaders. Individual cheering is not allowed. New men are expected to have the songs and cheers perfectly learned by the end of the first two weeks. It is not good form to cut or mark school furniture. Try to keep enlarging the number of your acquaintances, but be slow to make intimate friends.

Selections from 1920's rule book, *Customs and Points for New Men*



ising students from a wide range of ethnic, economic, and geographic backgrounds, in the belief that diversity itself can be an enriching component of education; providing a strong curriculum in intellectual and artistic disciplines to cultivate a vision of man's potential as well as an understanding of his accomplishments, and to establish a basis for further exploration and perhaps eventual specialization; offering a diversified program in competitive athletics and physical education to foster physical agility, endurance, and resilience, as well as an appreciation of physical achievement and the notions of play and sportsmanship; developing a program in health to promote an understanding of and respect for physical and emotional well-being and to encourage sound health habits; encouraging the study and exercise of religious beliefs, as a means of spiritual nourishment; offering experiences in leadership within the community, in order to develop responsibility, resourcefulness, and social concern; and providing innovation and a measure of leadership in secondary education, a responsibility dictated by our combination of independence, resources, and tradition.

The Place

The school is located on a hilltop in the town of Andover, a 45-minute bus ride from Boston and Cambridge. It is well situated for easy access not only to the historical, cultural and entertainment offerings of the Greater Boston area, but to the beaches and mountains for which northern New England is justly renowned.

Phillips Academy was the first boarding school to be incorporated in the United States (1780). During its more than two centuries the school has grown in size from a single rude building and a few acres of land to an extended campus of 160 buildings on over 500 acres.



The People

Students

There are approximately twelve hundred students in Andover's regular session, about forty percent girls, sixty percent boys. Day students comprise one-fifth of the enrollment. More than eight hundred others attend the various programs and institutes of the Academy's Summer Session.

Andover students come from every walk of life, from virtually every state in the union and from more than twenty foreign countries. They are divided into four classes: Seniors, Upper Middlers, Lower Middlers and Juniors — our traditional terms for 12th, 11th, 10th and 9th graders. Some are here for four years, most for a shorter time, but they all have two things in common: intelligence and the willingness to use it.

Faculty

The faculty number approximately two hundred; over half hold advanced degrees at the master's level or higher. The power of an Andover education flows directly from their scholarship and classroom teaching.

Andover asks much of the men and women who teach here: although the heart of the work is in the classroom, tradition calls for the teacher to serve simultaneously as House Counselor or student advisor, coach and part-time administrator. Andover teachers are accessible to students in the dormitory, in athletic endeavors, in extracurricular activities; they share an abiding interest in the growth of young people and a willingness to become directly involved in that process.



A year, a week, a day

Andover operates on a trimester system, offering about 290 separate courses that vary in length from one trimester to the full year. The year begins in late September and ends in mid-June, with breaks at Thanksgiving, Christmas and in the early spring.

Classes are held on Monday, Tuesday, Thursday and Friday, the full class days, and on Wednesday morning and every other Saturday morning.

Wednesdays and Saturdays are half holidays with no afternoon academic appointments. On alternate Saturdays there usually are no morning classes and Sunday is totally free. This flexible weekly schedule provides time for independent study, for special projects, for informal sports, shopping in Andover or trips to Boston, the beach or the mountains. Social events during the week are limited by the demands of the academic program, but the weekend program on campus includes dances, concerts, movies, plays and informal activities.

Participation in athletics is required of all students, and athletics and activities are scheduled four afternoons a week for two hours each. On Wednesday and Saturday afternoons, varsity and junior varsity teams often participate in interscholastic competition.

Meals are served in Commons, our fifty-year-old central dining hall, composed of four handsome, traditional dining halls and two completely modern serving areas. The cost of meals is included in the fees of both boarding and day students.

The Daily Schedule

7:15 a.m.	Commons opens for breakfast
8:00 a.m.-	Five 50-minute morning Class Periods. A student is likely to have four morning classes, each meeting four or five times a week.
1:00 p.m.	
11:00 a.m.-	
1:30 p.m.	Lunch at Commons
1:45 p.m.-	
3:45 p.m.	Sports
4:10 p.m.-	Two afternoon Class Periods: most students have one afternoon class.
6:10 p.m.	
5:15 p.m.	Commons opens for supper.
6:45 p.m.	Evening activities: Chorus rehearsal, Drama Lab plays, club meetings, etc.
8:00 p.m.	Evening Study begins
10:00 p.m.	Students in own dorm

An individual student is likely to have one morning period and one afternoon period free each day, depending on course and laboratory schedule.

Most students are eligible to take a day excuse each week and, after the first two weeks of the year, overnight excuses beginning after their last scheduled weekly appointment.

Course work is intensive and involves about twenty-five hours of outside preparation each week. Required athletics or afternoon activities total approximately six hours each week. In addition, all students are required to participate in the school's work program, performing assigned tasks, supervision or leadership responsibilities two hours each week. Despite the amount of time that must be spent on academic pursuits, most students become very involved in extracurricular activities and social events. The school encourages independence and personal responsibility: there are study hours but no study halls, and decisions about the use of one's time are largely left to the judgment of the individual.





Residential Life



Dancing was forbidden in the 1820's, "and when a rash Frenchman proposed to start a dancing academy in the town, the Principal [John Adams] did his best to have him summarily ejected by the village fathers."

Claude M. Fuess, *An Old New England School*

Dorms and Clusters

Boarding students live in dormitories with faculty House Counselors and their families. Although these buildings vary in size and house from four to twenty-four students, all are small enough to encourage close relationships among students and between students and House Counselor. One-third of the students live in single rooms; two-thirds have one or two roommates. Rooming arrangements vary from large one-room doubles to three-room suites; large dorms are likely to have students from at least three classes.

For many students, dormitory life is one of the most valuable aspects of their time at Andover. Whether it's planning a pancake breakfast or studying for a history mid-term, sharing it with people from very different backgrounds or from foreign lands is a rewarding learning experience.

Dormitories are grouped into six geographical units called "Clusters," each including girls' and boys' dorms, about two hundred students from all classes, and twenty to thirty faculty families. Clusters create the personal atmosphere of a small community in which everyone knows everyone else and people do most or many things together. The Cluster System is the heart of Andover's residential life, bringing the advantages of a small school to an institution that already has the advantages of size.

The Clusters have considerable independence; teachers and students together manage their own affairs under the leadership of a Cluster Dean. Each Cluster has its own student officers, discipline system, intramural athletics and informal social activities.

Clusters are responsible for administering much of the student work program, which is designed to develop a sense of community responsibility for the daily operation of the school. It also assists the school in reducing its expenses. Working a minimum of two periods a week, students share the jobs of returning books to library stacks, operating audio-visual equipment, serving as office helpers, messengers, laboratory assistants, and performing other essential tasks. Other students are responsible for the daily care of dormitories, while all residents of a given dormitory are responsible for keeping its entries free of litter and snow.

The Clusters take turns each week working in the dining hall, Seniors serving as overseers. Seniors have many other supervisory roles, including Cluster and School offices, editorial positions on school publications and other assignments which are of service to the Phillips Academy community.



Counseling and Discipline

Those who are not accustomed to a residential school may at first be surprised by the degree of independence an Andover student has; on the other hand, they may be surprised by the existence of rules and procedures necessary to protect the rights of individuals and to enable the school to achieve its ends. Existing rules have a dual purpose: to preserve the necessary order in the community so that effective learning can take place, and to teach students that individual freedom can be achieved only through due consideration for others. The school tries to keep rules to a minimum. Incoming students and their parents are provided with a copy of the *Academy Blue Book*, summarizing rules and regulations; all students are held responsible for its contents.

Each student has a faculty House Counselor who lives with his or her family in the dormitory and who is available for advice and assistance. This faculty member works closely with students in the dormitory on both the personal and academic level, and parents can expect to hear from the House Counselor at regular intervals. Parents are encouraged to turn to the House Counselor for information regarding a student's progress.



Each Cluster Dean supplements the work of the House Counselor and is available to students and parents for information and advice. Other support staff include academic advisors, who help students in the Cluster plan their academic programs, and the College Counseling Office, which assists all Seniors with their future educational plans.

Graham House serves the community in several ways. The staff offers psychological counseling, study counseling, study skills courses, student tutorial services, the Psychology Department curriculum, consultation to faculty and staff, and specialized workshops in response to residential needs.

Discipline is handled at the Cluster level and involves the Cluster Dean, House Counselor, other faculty and student representatives. Offenses involving a student's integrity, social offenses that threaten the well-being of other individuals or the school community, and continued infractions that indicate an unwillingness to come to terms with the demands of the school — all render a student liable to dismissal. Cluster recommendations for suspension or dismissal are made to the Headmaster, who makes the final decision. Examples are dishonesty, the possession or use of alcoholic beverages or illegal drugs and unauthorized absence from school bounds. Students may not possess, rent or drive any motor vehicle within school bounds; bicycles are permitted. Andover does not allow smoking, unless students have completed a school-administered course on the health hazards involved and have parental permission.

In a community such as Andover, all must commit themselves to the goals of the community and to loyalty to each other. Since education at Phillips Academy is both intellectual and humane, students and faculty derive mutual support from sharing of themselves and their ideals.

Trust and responsibility have many interpretations; these words have become hackneyed from overuse and misunderstanding. But the ideas they embody — sensitivity to others, willingness to explore and respect differing points of view, charity and humility in expressing judgment, readiness to cherish friendship, to depend and to be depended upon — are nonetheless fundamental. Such values can scarcely be legislated and can only be imperfectly defined. Yet the health and happiness of everyone in the community depend on consideration and awareness, restraint and candor, discretion and shared joy. Collaboration toward these imprecise but worthwhile ends is an expectation which all at the Academy hold.

Only boys and girls who feel that they can live happily with the rules and guidelines of Phillips Academy should apply for admission.



In the early 1930's Abbot alumnae parents tried to persuade Principal Bertha Bailey to abandon the required long black stockings worn with the girls' gym bloomers. To this request she steadfastly refused: "I don't like legs."



Harriet Beecher Stowe, author of *Uncle Tom's Cabin*, and her husband, a Seminary professor, lived in Stowe House. She is buried in the school cemetery. Mrs. Stowe shocked the strict Congregationalist community by giving parties and entertainments for students, was suspected of going to the theater and even of having "Episcopalian leanings." Claude M. Fuess, *An Old New England School*

The Campus Ministry

Philips Academy is committed to an ecumenical ministry that represents the Protestant, Roman Catholic and Jewish traditions and seeks to be responsive to the spiritual needs of the school. The school chaplains teach in various fields and have the additional responsibilities of worship services and of pastoral counseling. Andover students come from various religious traditions; some have no religious affiliation. The school wishes actively to support religious communities within the institution and hopes that a less formal but more focused approach to the spiritual life of the school will encourage other teachers and students to active participation and leadership.

Worship services are available for all who wish to participate. A Protestant interdenominational service and a Roman Catholic Mass are held on Sundays; the Jewish congregation has services regularly on Friday evenings.

Activities

Extracurricular activities are an important aspect of a student's education, and Andover offers a rich fare, thanks to the diversity of interests in the student body. From the Pre-Med Club member to the Model Railroader, it seems that all Andover students do something special in their free time.

Many of the activities are service-oriented; the Community Service Program places student volunteers in area nursing homes, elementary schools, youth centers and other agencies. Closer to home, the Tour Guide Association handles the responsibility of conducting campus tours for the Admissions Office. Older students who are members of the Tutorial Program offer help to fellow students in academic difficulty. The student radio station, WPAA (91.7 on your FM dial), is on the air from 6:30 a.m. to 11:30 p.m. daily, serving the local listening area as well as the student body. *The Phillipian*, the Academy's prizewinning student-run weekly newspaper, is wholly uncensored; students lay out the paper and do their own typesetting, as well as write the articles and headlines. The *Pot Pourri*, the school yearbook, and the school literary magazine, *The Mirror* (Robert Frost was an early contributor), provide more opportunities for those with a literary bent.

Cultural organizations include the Afro-Latino-American Society, the Asian Cultural Society and others; course-related groups range from the Astronomy Club to the Russian Club. The Chapel Council, the Newman Club and the Jewish Student Union support the "team" ministry in providing active religious communities for Andover students.

At any time during the week, actors and directors will be

working on a main stage play or on a student production in the Drama Lab; the Andover Student Political Union may be listening to a State Department official discuss the Middle East; the Natural History Club may be birdwatching on an ocean beach or — if the season is right — the Ski Club may be on its way to the White Mountains of New Hampshire.

Many students make extensive use of school facilities in their free time, whether or not they are affiliated with a club or organization. The Arts Center is a major focus of school life — darkrooms are used almost around the clock, and students and faculty interested in painting, metal sculpture, ceramics or design make use of the center's studios and workshops in their free time. The Music Department also provides facilities for students interested in pursuing music beyond the classroom.

There is no limit to the variety of extracurricular activities at Andover. Students who do not find an existing club or organization that meets their needs are encouraged to start one.

Undergraduate Organizations (Clubs)

Afro-Latino-American Society
Andover Student Political Union
Asian Cultural Society
Astronomy Club
Athletic Advisory Board
Backgammon Club
Band
Blue Key
Brass Choir
Bureau of Tutoring
Cantata Singers
Caucus (Af-Lat-Am publication)
Chamber Music Society
Chapel Council
Cheerleaders
Chess Club
Chorus
Coin Club
Day Student Union
Drama Workshop
Dungeon and Dragon Society
Duplicate Bridge Club

Eagle Scout Post 107
EAT (Environmental Action Team)
Eidolons (student photography publication)
Fidelio (madrigal singing society)
French Club
German Club
Health Food Club
Jazz Band
Jewish Student Union
Math Computer Club
The Mirror (literary magazine)
Model Airplane Club
Model Railroad Club
Muse
Natural History Club
Newman Club
Orchestra
Outing Club
The Phillipian (weekly student newspaper)
Philomathean Society (debating society)

Pot Pourri (yearbook)
Pre-Law Society
Pre-Medical Society
Press Club
Psychology Club
Radio Broadcast Association (WPAA-FM)
Russian Club
Sailing Club
Ski Club
Social Functions Committee
Spanish Club
Stage Crew
Stamp Club
Student Guides
SUMOP (Summer Job Opportunities)
Table Tennis Association
United Nations Club
Western Union
Women Students' Union
Young Democrats





Educational Resources

The Oliver Wendell Holmes Library

At the center of Andover's intellectual life is the 102,000-volume Oliver Wendell Holmes Library, named after the famous doctor and poet who was a member of the Class of 1825. The stacks are open to students. In addition to academic work, students and teachers use the library to explore new fields of interest and to read casually.

The library subscribes to over 260 American and foreign periodicals and daily papers from cities throughout the country. A microfilm file of *The New York Times* is available. Particular library treasures are the Jansson Atlas, printed in Amsterdam in 1657, papers and books of Oliver Wendell Holmes, and one of the world's leading collections of Vergiliana.

The Addison Gallery

The Addison Gallery of American Art operates both as a museum in the traditional sense and as an art center for the school and the community. In addition to organizing exhibits of American art from the collection, the museum staff originates exhibits of contemporary painting, sculpture, photography, video, film and crafts. Seminars bring artists in close contact with students to discuss contemporary art issues. In cooperation with Phillips Academy's Music Department, concerts by faculty and students are produced in the museum.

The holdings of the museum are recognized as a distinguished specialized collection: Allston, Copley, Morse, Stuart, West and others represent the Colonial period. Of special importance among the many paintings of the nineteenth century are examples by Cole, Doughty, Eakins, Homer, Inness, LeFarge, Ryder, Twachtman and Whistler. The early part of the present century is shown in the work of Bellows, Davies, Demuth, Hassam, Hopper, Luks, Marin, Prendergast and Sloan. Contemporary artists are represented by works of Calder, Lippold, Moholy-Nagy, Hofmann, O'Keeffe, Pollack, Shahn, Wyeth and others.



Respice Artem Patriae

"Respect the art of your country", was the admonition of Thomas Cochran, founder of the Addison Gallery of American Art 51 years ago, before New York was an international art center and when a museum dedicated to American art was still a novelty. Founded in the hope that "if Andover students could be surrounded by beautiful things, their lives would be immeasurably enriched", the gallery and its collections have fulfilled this vision.



The Robert S. Peabody Archaeology Museum

The Robert S. Peabody Foundation for Archaeology has conducted major archaeological research in this hemisphere for the last seventy-five years and has published many reports of its scientific investigations. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas. The laboratories of the museum are used in teaching and illustrating the Foundation's research. Mature students may undertake special study projects which involve the use of the Foundation's collections and library resources.

Current research is concerned with the origins of agriculture and with the concomitant rise of civilization in the New World.

The Cochran Sanctuary

The Moncrieff Cochran Sanctuary is a sixty-five-acre tract of rare beauty located so close to the center of school activity that it is in fact an extension of the campus. Landscaped areas planted with dogwood, azalea, rhododendron and laurel provide a succession of bloom that draws many visitors from late April to mid-June. A brook and two ponds attract nesting ducks and geese, and extensive natural wild areas, varied in terrain and plant life, provide nesting places for many species of land birds. Cross-country runners and skiers make extensive use of the Sanctuary, as does the Academy's Search and Rescue program.





The Academic Departments

The Curriculum

The curriculum of Phillips Academy contains both a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical. All departments offer courses beyond the level of preparation for college.

Classroom groups are small enough to permit individual attention; the average class size is fourteen. Students are placed in sections fitted to their attainment and, through accelerated sequences and advanced courses, are encouraged to progress at a rate commensurate with their ability and ambition. Many students fulfill requirements ahead of the normal year, increasing their choice of college-level courses and other elective opportunities. Andover's trimester system provides flexibility and variety in the curriculum and allows various combinations of independent work and off-campus projects.

Every student is assigned to an academic advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements and the student's particular interests. With the approval of the academic advisors and House Counselors, students may select their instructors, class times and sections during the Arena Day preceding each trimester. However, the school cannot guarantee that all students will be able to have their desired selections.

The curriculum and diploma requirements are described in detail in the *Course of Study*, which will be sent upon request to each preliminary applicant and to others who would like to receive it.

THE ARTS



When Humphrey Bogart flunked out of Andover in 1918, it was not from lack of ability, his teachers agreed. Headmaster Alfred Stearns wrote to Humphrey's father, a classmate of Stearns: "The boy is all right at heart and is bound to come out on top."

Visual Arts

At the heart of the art program is a concern that all students learn to see freshly and accurately, that they learn how to organize their efforts to make something happen, that they develop a critical eye for the coherence of their environment, all these with an independent mind.

The diploma requirement in art is as follows: Juniors and new Lower Middlers must take a trimester course in studio art; an entering Upper Middler must take a trimester course in studio art or music. Andover attempts to balance structured, problem-solving courses like the basic Visual Studies, with more adventurous advanced courses, organized around longer-term projects. For a student who desires several terms in art or design, the courses are here, whether the student's objective is a professional school, Advanced Placement in a liberal arts college, or simply a strong basis in a traditional area of general education.

The superb facilities of the Arts and Communications Center — fully equipped wood and metal shops, two complete photo labs, print-making equipment, painting and drawing studios, a kinetics studio — are supplemented by the several kilns available to ceramicists. The department welcomes extracurricular use as well as work related to courses, and faculty members are on hand every evening to encourage the idea that whether it's painting or bicycle repair, the Arts Center is the place to go.

Theatre and Dance

Courses in theatre are designed for students who seek formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work on plays. A variety of experiences is available; some courses are performance oriented; some are theory oriented; some are both. All combine classroom and workshop sessions; students work out practical theatrical problems together under the guidance of an instructor. Dance may be taken as a course or as an activity.

George Washington Hall, capable of handling audiences of one thousand, includes a flexible, professionally equipped proscenium stage. It has a full fly system, accommodation for numerous



lighting instruments and an elevator/pit. Recent main stage productions have included *The Me Nobody Knows*, *Cabaret*, *The Time of Your Life*, *Twelfth Night*, *Macbeth*, *Our Town*, and *Camelot*.

The Drama Lab, also in George Washington Hall, is a "black box" — an intricate arena/workshop with excellent lighting facilities, suitable for audiences of not more than seventy-five. Although main stage plays are usually directed by a member of the faculty, the Drama Lab allows students to direct plays themselves and to experiment with dramatic styles. A sample of productions from recent years includes plays by Albee, Ionesco, and Pinter but original student work is also performed here.

Theatre students are encouraged — but not required — to supplement their classwork by participating in any of the numerous productions mounted each year; anyone may audition for the Andover Touring Company, for several years part of an exchange program with schools in England, touring with such plays as *Our Town*, *The Fantasticks*, *Scenes from American Life* and *Godspell* during spring vacation.



Music

The Music Department faculty consists of five full-time and several part-time instructors. Other highly qualified instrumentalists are available to teach voice, piano, organ, classical guitar, brass, percussion, strings, and woodwinds.

Andover offers courses for the beginner as well as for intermediate and advanced students both at the applied level (study of musical instruments or playing in a musical organization) and in the history, appreciation, and theory of music. An entering student who has not had the opportunity to learn to play may join a class to study an orchestral instrument. He or she may also, for a nominal fee, study privately.

The Nature of Music, or Music 20, is the diploma requirement in music, and a prerequisite for most courses in the history, appreciation, and theory sections. A more advanced three-part course, Theory of Music, runs in sequence throughout the year.

Graves Hall, the department's newly renovated home, has large rehearsal halls for the Concert

Band and the String Orchestra, many individual practice and ensemble rooms, one music classroom, teaching studios and an electronic music studio. The department also has a large, up-to-date record library and listening room. The Chorus has a fully equipped rehearsal room and a library of music literature in the Cochran Chapel, a short distance away. The Chapel also houses two new Andover organs for the use of beginning and advanced organ students. One is located in Kemper Chapel; the other, in the main chapel, is a 30-stop, double manual, tracker action instrument.



VISUAL ARTS

Introductory Studio Courses

Visual Studies
Visual Studies for Juniors
Introductory Ceramics
Introductory Photography

Intermediate Studio Courses

Visual Studies (Art 10) is a prerequisite for all intermediate courses.

Drawing
Animation
Two-Dimensional Design
Three-Dimensional Design
Intermediate Ceramics
Intermediate Photography

Advanced Studio Courses

Visual Studies (Art 10) is a prerequisite for all advanced courses.

Graphics and Photography
Studio Photography
Painting
Filmmaking
Advanced Ceramics
Printmaking
Advanced Photography
Sculpture

Kinetics

Architecture
Contemporary Communications
Calligraphy: The Art of Lettering by Hand
Advanced Placement in Studio Art
History of Art: Painting and Sculpture
History of Art: Architecture
MUSIC

Applied

Beginning Instruments
Recorder Ensemble
Brass Ensemble
Woodwind Ensemble
String Ensemble
Fidelio Society
Band
Chorus
Chamber Orchestra
Private Instrumental and Vocal Lessons

The Nature of Music
Developing Musical Skills

History and Appreciation

Independent Study in the History and Literature of Music

Jazz

Popular Music in America

Theory

Orchestration and Conducting
Theory of Music I
Theory of Music II
Theory of Music III
Electronic Music
Advanced Techniques in Electronic Music

THEATRE AND DANCE

Theatre

Introduction to Theatre
Introduction to Acting
Public Speaking
Acting Workshop (Intermediate)
Advanced Acting and Directing Workshop
Stagecraft
Play Production
Shakespearean Workshop
Playwriting

Dance

Introduction to Dance

CLASSICS

Latin and Greek — still? Yes, as futuristic nightmares and present turmoils are reawakening a search for order, perspective and ideals in the human experience, names like Plato, Vergil, the Parthenon and the *pax Romana* not only symbolize great milestones in that search but also suggest the habits of mind that produce enduring greatness — the same habits of mind that show up so clearly in a sentence, paragraph or entire work of Latin or Greek literature.

The chief aim of the Classics Department is to help students rediscover this sense of order and ideals, in the hope that they may apply it, in turn, to the challenges they face today. Many recognize this by choosing Latin or Greek as the foreign language in which to fulfill the diploma requirement. Others elect one or both as second or even third languages. Still others opt for elective survey courses in various aspects of Classical civilization, as listed below, or, by special arrangement, for independent projects in reading or research.

CLASSICS

Greek

First Year: basics of language and culture

Accelerated First Year: two years in one

Introduction to Greek Language and Culture (one term)

Second Year: Xenophon, Plato, New Testament

Third Year: Homer, Euripides

Fourth Year: Sophocles, lyric poets, Thucydides

Latin

First Year: basics of language and culture

Accelerated First Year: two years in one

Introduction to Latin Language and Culture (one term)

Second Year: Caesar, Livy, Plautus

Third Year: Cicero, Sallust, Vergil

Fourth Year: Vergil's *Aeneid*

Fifth Year: Horace, Catullus, Livy, Tacitus

Greek Civilization

Roman Civilization

Epic Poetry

Etymology

Ancient History

Classical Mythology

Survey of Greek Literature

Survey of Roman Literature

ENGLISH

Convinced that level of achievement is more important than the number of years a subject is studied, the English Department has established modest but firm diploma requirements. A student must prove himself competent in writing and reading through the English Competence course and, by taking the Literature Sequence, acquire a sense of the depth and breadth of his literary heritage.

Once the student has successfully completed that Literature Sequence, which normally takes a year and offers several options, opportunities multiply. Students may enroll in any of the Literature Sequence courses that they have not yet taken; they may study any of the more than twenty advanced or specialized courses offered by the department; Seniors may qualify for an independent project supervised by the teacher of their choice.

The department also serves the needs of less advanced students. Tutorials are offered for train-



ing in the fundamentals of language.

The walls that used to separate academic departments are crumbling. A number of the courses in Theatre are taught by members of the English Department. Most of the interdisciplinary courses are related to English studies. A course in English etymology is taught by the Classics Department. Several of the foreign language departments offer courses about their literature in English translation, but the fundamental requirement does not change. Every student who graduates from Andover has either passed the Competence course in the basic skills of writing and reading or English 300.

ENGLISH

Introductory Courses

Language Skills

English 300 (for Seniors and Postgraduates)

Required Sequence Courses

English Competence (three terms)

Lit B, The Comic View, The Tragic View, The Mythic View (two terms)

Lit C, Shakespeare (one term)

Elective Courses

(Only courses with sufficient enrollment will be given.)

Efficient Reading

Irish Studies

Great Writers Before 1850

Introduction to Writing

Hemingway: The Man and His Work

Black Literature

James Joyce

Man and God

Forms of Literary Imagination

Modern Playwrights

Shakespeare: The Man, The

Times, The Theatre, The Plays

Satire and Comedy

Novel and Drama Seminar

Creative Writing

American Writers of the

Twentieth Century

Milton and Spenser

Chaucer and His Age

Wit and Poetry in the

Seventeenth Century

Writing Short Fiction

Images of Women



Graceful Bulfinch Hall (1819) has been in Academy use for more than 150 years as a recitation hall, gymnasium, and dining hall and now houses Andover's English classes. Dr. Oliver Wendell Holmes, Class of 1825, immortalized "the classic hall" in his poem, "The School-boy," written over 100 years ago for the Academy's Centennial Celebration.

HISTORY AND THE SOCIAL SCIENCES

The courses in History and the Social Sciences cover a broad spectrum of human experience: from the Vietnam War to ancient Athens, from the modern American Presidency to primitive cultures, from the American family to Chinese society. They range in teaching techniques from drill in close reading, note-taking and testing to individual projects, written or oral, conceived by students. All are based on the conviction that a citizenry that is informed about man's experience, both past and present, is essential to a democracy such as ours. It is the hope that once interest in the story of man has been kindled, it will be pursued for the rest of an individual's life.

No course in the department relies on a single textbook. Students work with paperbacks, books on reserve in the library, mimeographed handouts, movies, and slides. In all courses emphasis is placed not only on the subject matter studied but also on the acquisition of basic historical skills that should serve the student well throughout the remainder of his educational career.

The courses for the two lower classes focus on courses in biography — American and European. These courses emphasize study skills basic to the study of history. The department believes that the study of great men and women holds a special interest for this age group and reinforces the significance of the individual's role in history. In addition, these courses are designed to prepare the students for the required course in United States History to be taken in the Upper Middle or Senior year and for other upper-level history courses. Other courses for the lower classes include one in anthropology, and one in Colonial America.

The diploma requirement for History and the Social Sciences is successful completion of United States History plus one trimester elective in an upper level non-United States History, or in history prior to the settlement of the Americas, or in a social science course. These are introductory survey courses. There are also advanced seminars in various subjects in American Civilization for seniors who have completed the diploma requirements. Again the approach is topical; the tradi-

tional aim of training students to handle historical material with discretion and to write essays containing substantive factual support for general statements remains; the pedagogical techniques for accomplishing this are constantly under review. In United States History and in many of the trimester electives, students are required to choose their own topics for an extensive paper; they are encouraged to use the raw materials of history — newspapers, letters, diaries, interviews. Qualified students in American History may spend the spring term in Washington, working as interns in Congressional offices.

HISTORY AND THE SOCIAL SCIENCES

Social Science

The Emergence of Man
The Emergence of Society
Introduction to Economics
The Modern American Presidency
American Race Relations and Sectionalism
Urban Studies Institute
International Relations: The Present Patterns
Food and Hunger in Developing Countries

History

Early American Society
American Biography
European Biography
The United States
American History for Foreign Students
Ancient History
Social History of the Middle Ages
Modern Europe: A Survey
The Soviet Union
Modern Russia: History and Literature
Tudor England
Victorian England
International Relations: The Present Patterns
Modern Japan
Modern China
The Middle East
Africa and the World
Latin American Studies
Families in America
American Urban History
History and Mathematics
Topics in the History of Phillips Academy
and Abbot Academy



MATHEMATICS

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late twentieth century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his energies and curiosity to the organization of mathematical knowledge.

The mathematics curriculum is built around a core sequence of eight trimester courses, three of elementary algebra, two of geometry, and three of precalculus topics, completion of which will satisfy the diploma requirements. An additional trimester is usually required before entering calculus. Students whose previous course was elementary algebra will take *Geometry* unless our placement test indicates a need for one term of *Algebra Review* first. Those who enter with one year of algebra and one year of geometry will satisfy our diploma requirements by taking the first three precalculus trimesters unless the placement test shows a need for *Algebra Consolidation* first. The latter course delays the start of precalculus for one year and is

followed by the last three precalculus trimesters. There are a variety of special courses designed for new students who fall between the above criteria.

The department also offers many elective, term-contained and year-long courses, descriptions of which may be found in the *Course of Study*. Over one-third of all mathematics is taken electively, much of it in preparation for the Advanced Placement Examination. These courses include the study of limits and sequences, number theory, elementary and advanced calculus, analytic geometry, differential equations, probability statistics, computer analysis, linear algebra and vector analysis.

The Mathematics Department is located in Morse Hall, which also houses the campus computer center offering time sharing in the BASIC-PLUS language through ten public terminals. Instruction and practice in the use of the computer are given in the required course sequence. The main computer is a PDP-11/70 manufactured by the Digital Equipment Corporation. The department also has several micro-computers for student and classroom use.

The community of students who like math at



Andover is sizeable. They share their curiosity and knowledge by offering to tutor other students at the school, and by participating in inter-scholastic competition under the aegis of the Math and Computer Clubs.

MATHEMATICS

*Courses Leading to Satisfaction
of the Diploma Requirement*

Elementary Algebra	Mechanical Drawing
Algebra Review	Navigation
Geometry	Numerical Methods
Algebra Consolidation	Probability
Precalculus	Statistics
Elementary Functions	

Elective Courses

(Only courses with sufficient enrollment will be given.)

Calculus
Computer Programming; beginning, intermediate and advanced
Infinite Series and Differential Equations
Linear Algebra and Vector Calculus

MODERN FOREIGN LANGUAGES

As long ago as 200 B.C. the Latin poet Ennius used to say that because he knew three languages he had three hearts. Andover can render no finer service to today's world than to send forth its alumni with many hearts, ready and able to feel for, to understand, and to respond to the millions of people who speak languages other than English.

Acknowledging the importance of foreign languages, Andover requires for the diploma three years of an ancient or modern language. (For Greek and Latin, see Classics.) The modern foreign languages offered are Chinese, French, German, Italian, Russian and Spanish. Emphasis is on the spoken word, and the foreign language is the basis for all communication in the classroom. Small classes make possible maximum participation, with supplementary practice provided by our versatile language laboratory. There are opportunities to join accelerated classes which complete, for example, the work of four years in three.

At the 4th-, 5th- and 6th-year levels the study of literature may be supplemented by courses in the

art, history, geography and music of the foreign country. In upper-level courses students can prepare for the Advanced Placement Examination and qualify for advanced courses when they enroll in a college. Superior students may carry out independent projects, including apprentice teaching, under careful guidance.

At all levels of study progress in the foreign language is facilitated, and the resources of the classroom are expanded, through occasional use of communication media (periodicals, radio, etc.) and such activities as the staging of plays, the use of the school's radio station for broadcasts in foreign languages, festivals, language tables in the dining room, movies, clubs, visits by performing groups, and trips to language events in Boston and at nearby schools and universities. Students are urged to consider opportunities, sponsored by Andover or by other schools, to live and study abroad.

For Andover's School Year Abroad program, see page 44.

Chinese

In response to the importance of China and its language, and the need for some school to provide leadership in instruction at the secondary-school level, Andover is developing an intensive course in Chinese language (Mandarin) as a senior elective.

French

Before the outbreak of the French Revolution, French was considered the universal language of the West. It was the language of diplomacy, was already flourishing as a literary medium and, because of its clarity and precision, reflected both French culture and philosophy, influencing the development of democratic institutions in the United States as well as in other countries. The study of French rewards the student with the ability to communicate with French-speaking peoples and to appreciate the importance of order in expression, broadening his views through a growing familiarity with the rich and lively literature and civilization that the language represents.

German

German is central Europe's principal language, and knowledge of it opens up an understanding of European culture and affairs. Students may learn German to read the works of Goethe, Schiller, Lessing, Kafka, Hesse, Brecht and Grass in their original form, or to follow the arguments of Hegel and Nietzsche, or perhaps to understand more intimately the background of modern socialism and democracy in the world. Many of the most important developments in modern physics, electronics, chemistry and engineering were originally published in German, and American businesses are realizing increasingly the importance of personnel able to speak German.



Italian

The growing popularity of Italian in American schools and colleges reflects a growing awareness of the charm of the Italian language and of the rich cultural heritage which it serves. Andover's intensive course for Seniors attracts students with rich experiences in other languages, is conducted in Italian, and has the scope and pace of a course for college freshmen.

Russian

Approximately forty percent of Russian secondary school students are learning English. A fraction of one percent of American secondary school students study Russian. For cooperation, understanding, and influence, our doctors, diplomats, scientists, and businessmen should be able to communicate with Soviet counterparts in Russian.

Since secondary school is the best place to begin,

Andover has established a rich program for our beginning as well as our advanced students.

Spanish

The Spanish Department is anxious to help students discover the varied cultural heritage of the Spanish-speaking world through intensive study of the language, both spoken and written.

It seems particularly important to learn a language spoken everyday by millions of Americans across the U.S. In addition, Hispanic literature, from Cervantes to Borges, has played a vital role in world literature, as attested by the frequency with which Hispanic writers have been awarded the Nobel Prize for Literature.

Students who enter the professions will find Spanish an indispensable tool. But whatever they do, Spanish will be the key to a richer, more rewarding life.

MODERN FOREIGN LANGUAGES

Chinese and Italian only offer an intensive introductory course for seniors. All other languages offer introductory and intermediate courses, with opportunities for acceleration at those levels. Students are then eligible for the following courses:

French

Language and Review and Contemporary French Life
Selected Readings
Village Français
French Civilization
Conversation and Phonetics
Written Expression
Literature and Film: French
Theatre
French Literature
French History
French Civilization Outside of Europe
Québec et les Québécois
Stylistics
Advanced Placement
Contemporary Literature

German

Literature, Composition and Conversation
Language and Literature for Advanced Placement
Special Topics

Russian

Literature, Composition and Conversation
Advanced Literature, Composition and Conversation
Russian Press
Literature
Special Topics
Russian History and Literature

Spanish

Second and Third Year, Advanced, with winter term in Mexico
Spanish Language Review
Aspectos de la Cultura y Civilización del Mundo Hispánico
Introduction to Literature, with Grammar Review
Literature and Culture, with Grammar Review
Literature for Advanced Placement
Advanced Studies in Literature
Special Topics: Literature, Sociology, Culture
Latin American Studies

PHILOSOPHY AND RELIGIOUS STUDIES

The department seeks to initiate students into three distinctive human quests: the search for meaning, the search for justice and the search for the foundations of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered on a variety of topics, at a variety of levels, and involve four prepared class periods.

PHILOSOPHY AND RELIGIOUS STUDIES

Introduction to Religion
Non-Western Religions
Biblical World-view
Portraits of Jesus
Man's Search for Meaning
Introduction to Ethics
Bioethics
Law and Morality
Non-Violence
Responses to the Holocaust
In Search of Justice
Proof and Persuasion
Great Philosophers

SCIENCE

Archaeology

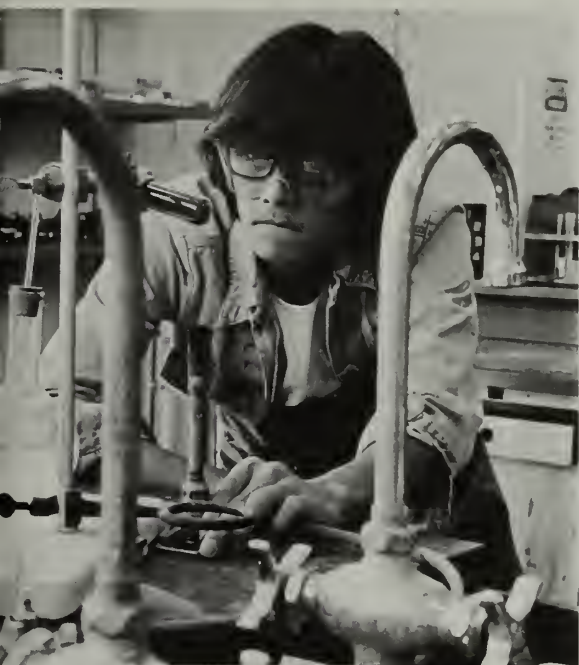
The staff of the Robert S. Peabody Foundation for Archaeology offers Andover students an introductory term-contained course in archaeology. The course deals with the prehistoric development of civilization and with archaeological theory and method. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas.

Biology

Andover provides ample opportunity to develop interest in the biological sciences. In addition to two year-long courses in introductory biology the department offers four courses on the advanced placement level and three elementary courses which are particularly well suited to serve younger students. The introductory courses give students a general background and an understanding of some of the current trends in biology. Field trips, laboratory work, independent projects, lectures, slides, films, and video tapes are all part of the courses. Most of the laboratory work performed during the Spring term is devoted to independent projects.

The term-contained advanced courses prepare students for the Advanced Placement Examination. These courses review some of the material presented in the introductory courses as well as introduce new concepts and techniques. The advanced laboratory work gives students experience with the techniques of chromatography, electrophoreses, spectrophotometry, centrifugation, statistical analysis and dissection. Computer simulations are also used either on the Academy's PDP 11/70 or on the Apple II microcomputers.

Bird watching trips are sponsored occasionally throughout the year by the Natural History Club for interested students who may or may not be enrolled in a biology course. A small zoo, consisting of rats, mice, gerbils, and various reptiles is maintained in Evans Hall. Its population varies with student interest, the reproductive rate of the animals and the dietary needs of the resident boa.



In the basement of Evans Hall there is a superb bird collection on loan from Harvard University and an extensive shell collection is exhibited in various parts of the building.

The Evans Hall greenhouse is a refreshing place to visit during the long winter months. Students grow plants there or start potted plants for their own rooms. An environmental growth chamber is available for those interested in experimenting with photoperiodism.

Chemistry

The Chemistry Department offers full-year introductory courses at various levels which prepare students for more advanced work in chemistry.

Many students have undertaken laboratory projects. For example, one student recently investigated the "Miller experiment," the synthesis of amino acids by electric discharge through methane, water vapor and ammonia. Another examined the colors of optically active coordination compounds of cobalt. One student spent a term synthesizing organic compounds and examining their infrared spectra. Others have studied organic qualitative

analysis as an introduction to the chemistry of organic functional groups.

Students usually suggest their own experiments, but they can also adopt and change existing projects in a creative way. A student might design computer programs for chemistry problems, study the use of microchemistry to diminish school laboratory pollution, or explore molecular structures with infrared spectroscopy.

The department has the equipment for the usual experiments in elementary synthesis and analysis, including three Mettler electronic, analytical balances. There are instruments which enlarge the scope of feasible projects — a pH meter, several vacuum tube voltmeters, a Kontes Universal Electrode Kit, a Kern polarimeter, a Bausch and Lomb Spectronic 20 colorimeter and a Perkin-Elmer 700 infrared spectrophotometer. Convenient access to computer facilities is provided by a teletype terminal located in the Roscoe E. E. Dake Computer Room in Evans Hall.

Physics and Astrophysics

The Physics Department offers five introductory courses at various levels of difficulty in order to meet the needs of Andover students. Some representative topics are mechanics, waves, electromagnetism, light, and "modern physics." Laboratory work, classroom demonstrations and extensive problem solving enable students to develop both a qualitative and quantitative understanding of the concepts of physics. Also offered are courses including earth science, astronomy, relativity and early quantum theory, and university-level Advanced Placement physics.

The Physics Department operates the Thornton Observatory which houses a research-grade 16-inch reflector, a 6-inch Brashear refractor and six other portable telescopes. These instruments are used in astronomy courses as well as in project work; recent projects have included such areas as solar, lunar and planetary study; astrophotography; computer simulations; and orbit analysis.

Past student projects have included laser transmission of information, holograms, the construction of an electronic calculator, speed of light measurements, determinations of the electronic charge and mass, interferometer measurements,

and finding the gravitational constant. Formal and informal contact with the faculty encourages students to examine the interaction of physics and the environment, including man, thus hopefully promoting better understanding of the processes of scientific investigation.

Psychology

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strategies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained.

ARCHAEOLOGY

Archaeology

SCIENCE

Introductory Physical Science

Introduction to Biological

Science

Earth Science

Astronomy — the Solar System

Introduction to Energy

Oceanography

Ecology

Introduction to Zoology

Junior Science Honors

Energy and the Future

Biology

Introductory Biology

Anatomy and Physiology

Chemistry

Elementary Introductory Chemistry

Introductory Chemistry

Research in Chemistry

Elementary Organic Chemistry

Stereochemistry

Advanced Placement Chemistry

Honors Introductory Chemistry

— Advanced Placement

Physics

Introductory Physics

College Physics

Advanced Physics

Electronics

Relativity and Quantum

Mechanics

Special Science Courses

Animal Behavior

Observational Astronomy

Astronomy — The Universe

Beyond the Solar System

Geology

PSYCHOLOGY

Human Relations

Human Sexuality



Dr. Charles Abbot, Class of 1891, a solar energy pioneer and head of the Smithsonian Institution for many years, predicted in the early 1940's that solar energy would become the primary source of power when oil and coal were depleted. In 1972 he received his last patent, for a device to convert solar energy into electricity, shortly before his 100th birthday.

OTHER COURSES

INTERDISCIPLINARY

Study Skills

Literature of the Quest

Russian Literature in English

Soviet Literature in English

Greek Literature in Translation

Roman Literature in Translation

Typing (non-credit)

Etymology

PHYSICAL EDUCATION

All Juniors and new Lower

Middlers are required to elect one trimester of P.E. 10 in addition to their regular athletic commitment.

Physical Education





Complementary Programs

Andover's complementary programs combine a number of innovative ideas designed to promote better coordination between public and private education nationally. The concept behind these programs is that of multiple schools. While one school may be accepted as the "home-base" diploma-granting institution, several other institutions may be utilized as complements to this school. Thus far, the multiple schools ideas has taken form in several program models which are open to Phillips Academy students as well as students from other schools.

The Andover Summer Session

The Andover Summer Session is a short intensive academic program in which both innovative and traditional courses are taught in only six weeks. Courses in all subjects and at all levels demand hard work — harder work than most students have ever before experienced. Besides English, modern languages, mathematics, history, and the sciences, the curriculum offers such opportunities as Play Production Workshop, Social Psychology, Great Philosophers, Law and Morality, and Film Workshop, Modern Astronomy, Archaeology and Anthropology, Oceanography and Marine Biology, and Modern Economics.

Other features of the Summer Session are special courses in writing, including the nationally known "Competence in Reading and Writing" (developed at Andover); an expanded ESL Program (English as a Second Language) for foreign students who wish to achieve English fluency; and a Chamber Music Program which provides a unique opportunity for able music students in all combinations of piano, strings, winds, and voice, including individual instruction, small ensemble work, or-

chestra, and chorus; and an intensive Studio Art program for serious students of the visual arts who wish to develop a portfolio in preparation for the Advanced Placement Examination in Studio Art.

The Summer Session makes use of all the school's facilities and is open to able boys and girls from all parts of the country and abroad. Applicants must be graduates of the 9th, 10th, 11th or 12th grades. A catalog can be obtained by writing:

James L. Bunnell, *Director*
The Andover Summer Session
Phillips Academy
Andover, MA 01810
Tel. 617/475-3400, ext. 170

(MS)²: Math and Science for Minority Students

The (MS)² - Math and Science for Minority Students - Program offers Black and Hispanic Students three consecutive tuition-free summers of intensive study of mathematics and science. Ninth grade boys and girls are selected on the bases of their superior ability and strong interest in mathematics and science and financial need. The goal of the (MS)² Program is to prepare minority students to compete successfully for admission to selective colleges and for careers in science, engineering and medicine. Further information can be obtained by writing:

Elwin Sykes, *Director*
(MS)² Program
Phillips Academy
Andover, MA 01810



The Short Term Institutes

Andover has had a series of Short Term Institutes which are intensive, multi-week courses of study in a single subject, designed to offer high school students a unique residential learning experience. First taught in the fall of 1974, the Institutes offer a program in Art during winter term and special summer Institutes within the context of the Summer Session. These Institutes are designed to provide intensive study in a particular field at Andover and to complement a student's home school program, not to compete with it.

School Year Abroad

School Year Abroad offers to qualified Upper Middlers and Seniors a full academic year of living and studying in France or Spain. Originated by Andover, SYA is now jointly sponsored by Andover, Exeter and St. Paul's School. The program gives American students the advantages of living in a foreign culture without sacrificing progress at their home schools or strong preparation for college. Students live with host families, participate in the activities of local athletic and social clubs, and pursue a course of study (both in English and Spanish or French) under the supervision of sponsoring school teachers. SYA offers 19 days of group travel, all college boards, and provides full academic credit, permitting students to graduate from Phillips Academy with their own class. School Year Abroad is financially independent of its sponsoring schools. Financial aid is available. A catalog can be obtained by writing:

Harrison F. McCann, *Director*
School Year Abroad
Phillips Academy
Andover, MA 01810

Other Off-Campus Programs

Andover offers several complementary residential programs. The Washington Intern Program, sponsored by Andover and Phillips Exeter Academy, allows a group of Upper Middlers and Seniors to spend the spring term in Washington working in the offices of U.S. Senators and Congressmen. Phillips Academy tuition, fees and financial aid do not cover the cost of this program.



In addition to school-sponsored programs, many Seniors arrange off-campus projects related to their special interests. Some have worked as interns with officials in local government and members of the Massachusetts legislature, while others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative and careful planning of a course of study that will meet diploma requirements and free a block of time during the term.



Athletics



Archie Bush, Class of 1866, returned from the Civil War to complete his studies and organized a baseball team for Andover's first interscholastic sports competition. When Archie and his friends cut a geometry class to attend a baseball game, Principal Samuel Harvey Taylor, who brooked no nonsense, kicked them out of school. The Trustees rescinded this action years later and granted them all diplomas. Too late for Archie, who had died on his honeymoon trip to Europe.

In sports, as in studies, students are expected to meet basic requirements and are given wide choice in broadening and deepening their skills, interests and dedication in athletics.

A basic evaluation test is given to all new girls and boys to insure that each student has the physical skills necessary for further participation in the athletic program. Special courses are required of those students whose test results indicate a need for attention in the area of physical aptitude. Similarly, non-swimmers are given instruction toward meeting reasonable standards of proficiency. In addition, Juniors and new Lower Middlers take physical education five hours a week for one term, as well as regular athletics.

The regular afternoon athletic program includes a wide variety of offerings in varsity and junior varsity competitive interscholastic sports, in intramural cluster-organized athletics and in instructional and recreational physical activities. New students are strongly encouraged to participate for at least one term at Andover in a team sport or a dance performance program. Wherever numbers permit, separate interscholastic competitive team programs are created for Junior boys.

Upperclassmen have the opportunity to substitute an activity or project for one term of athletics a year. Each spring the department attempts to offer an evening Senior Life Saving course and a Water Safety Instructors' course, in addition to required athletics, for those swimmers who wish official accreditation.

The school maintains several athletic facilities which include 12 playing fields and 25 tennis courts; the Borden, Memorial and Abbot Gymnasium Complex with swimming and diving pools, basketball and squash courts, weight training room and other conventional gym spaces; the

newly renovated Case Memorial Cage with its indoor track; the Sumner Smith Hockey Rink; the crew boathouse on the Merrimack River; the ski trails and jump at Holt Hill; and finally the Search and Rescue Room in Evans Hall which provides the base of operations for Andover's popular outdoor program.

Phillips Academy is committed to a required athletic program that provides a variety of sports and activities to its students. The Academy discourages overspecialization in sports at this age level; the athletic program is a complement to, not a substitute for, the academic curriculum. The Athletic Department oversees the program and its facilities with the support and advice of the Faculty Athletic Committee and the Student Athletic Advisory Board.

Health Care

The Isham Infirmary of Phillips Academy is fully licensed as a hospital by the Commonwealth of Massachusetts. The Medical Director, Dr. Claire

D. Wilson is a pediatrician specializing in adolescent medicine, is on the staff of Children's Hospital Medical Center, Boston, and is a Junior Fellow of the American Academy of Pediatrics. The Infirmary has an x-ray department with a full-time technician. Basic laboratory services are also available at the Infirmary. Qualified physiotherapists are available either in the Infirmary or Trainers' Room. Graduate nurses are on duty twenty-four hours daily, and additional graduate nurses manage the Outpatient Services from 7:30 a.m. to 8:00 p.m. Isham Infirmary is staffed and equipped to care for most problems, and nearby general hospitals are available for major surgery or serious emergencies.

In addition to the daily outpatient clinic held by the Medical Director, regular clinics are conducted at Isham Infirmary in dermatology, orthopedics, and dentistry. Gynecologic counseling is available by appointment. Staff consultants are available in most specialty fields of practice, and full-time clinical psychologists can provide professional counseling.

FALL TERM

Boys

Ballet
*Ceramics
*Community Service
Crew
Cross-Country
Cycling
Fitness
Football
Karate
Modern Dance
*Music
Paddle Tennis
*Photo Field Trips
Search & Rescue
Soccer
Squash
Swimming
Tai Chi
Tennis
Yoga

Girls

Ballet
*Ceramics
*Community Service
Crew
Cross Country
Cycling

Field Hockey

Fitness
Karate
Modern Dance
*Music
Paddle Tennis
*Photo Field Trips
Search & Rescue
Soccer
Squash
Swimming
Tai Chi
Tennis
Volleyball
Yoga

WINTER TERM

Boys

Ballet
Basketball
*Ceramics
*Community Service
*Drama
Fitness
Gymnastics
Hockey
Modern Dance
*Music
Paddle Tennis
Search & Rescue

Skiing:

Competitive (Alpine and Nordic)
Recreational (Cross Country)
Squash
*Stage Crew
Swimming
Track
Wrestling
Yoga

Girls

Ballet
Basketball
*Ceramics
*Community Service
*Drama
Fitness
Gymnastics
Hockey
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Skiing:
Competitive (Alpine and Nordic)
Recreational (Cross Country)

Squash

*Stage Crew
Swimming
Track (non-competitive)
Yoga

SPRING TERM

Boys

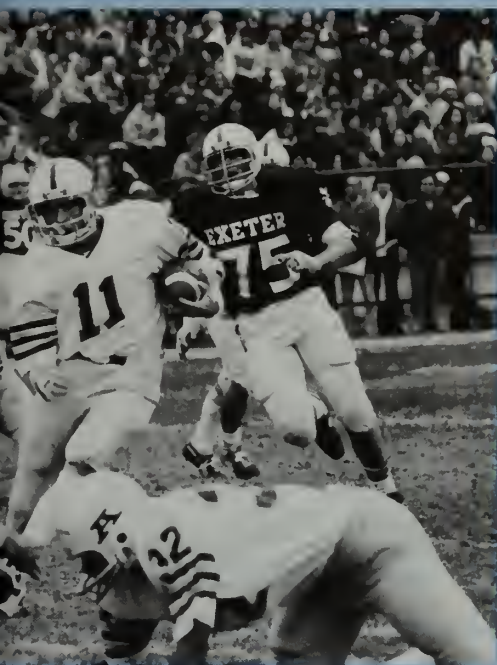
Ballet
Baseball
*Ceramics
*Community Service
Crew
Cycling
Fitness
Golf
Karate
Lacrosse
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Softball
Squash
*Stage Crew
Swimming
Tai Chi
Team Cycling
Tennis
Track

Yoga

Girls

Ballet
*Ceramics
*Community Service
Crew
Cycling
Fitness
Golf
Karate
Lacrosse
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Softball
Squash
*Stage Crew
Swimming
Tai Chi
Team Cycling
Tennis
Track
Yoga

*Activities in place of sports are available one term a year to upperclassmen



in the 1840's the widow of Principal Osgood Johnson devoted herself to the care of Wick Seminary students at Samaritan House, built and named for that purpose, now a student dormitory. In spite of this, rows of gravestones mark the toll of epidemics. An Academy graduate of 1890 reports that no such care as Widow Johnson's was available to the Academy students of the 1890's: "There was no infirmary. If you were ill, it was nobody's business but your room-mate's, who brought you meals from Marland's unappetizing fare."

CALENDAR 1983-1984

Fall Term

Sept. 7, Wed.	Varsity Teams return, as invited
Sept. 7, Wed.	Faculty return by evening
Sept. 11, Sun.	New students arrive and register
Sept. 13, Tues.	Old students return and register
Sept. 15, Thur.	Classes begin
Oct. 21, Fri.	Mid-term academic review
Nov. 4-6 Fri.-Sun.	Parents' Weekend (all parents)
Nov. 7, Mon.	No classes
Nov. 23, Wed.	Thanksgiving vacation begins, 12:50 p.m.
Nov. 28, Mon.	Thanksgiving vacation ends, 8 p.m.
Dec. 5, Mon.	Classes end, 12:50 p.m. (Wednesday schedule)
Dec. 10, Sat.	Christmas vacation begins, 12 noon

Winter Term

Jan. 4, Wed.	Christmas vacation ends, 8 p.m.
Feb. 3, Fri.	Mid-term academic review
Feb. 6, Mon.	Mid-winter holiday (no classes)
March 5, Mon.	Classes end, 12:50 p.m. (Wednesday schedule)
March 10, Sat.	Spring vacation begins, 12 noon

Spring Term

March 27, Tues.	Spring vacation ends, 8 p.m.
April 27, Fri.	Mid-term academic review
May 28, Mon.	Classes end, 12:50 p.m. (Wednesday schedule)
June 1, Fri.	Spring trimester examinations end, 6 p.m.
June 3, Sun.	Commencement
June 7, Thurs.	Spring trimester academic review meeting, 9 a.m.
June 8-10 Fri.-Sun.	Alumni Reunions
June 28, Thurs.	Summer Session begins
Aug. 9, Thurs.	Summer Session ends

Admissions

APPLICATION PROCEDURE

Priority will be given to those candidates who complete the application procedure, including the interview, by February 1. A decision from the Admissions Committee will be mailed on March 10. The possibility of admission is considerably lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. It is also possible that 12th Grade and Postgraduate candidates will not be notified until late spring. A deposit of \$200 is required to reserve a place at the time admission is offered to an applicant.



L. to r., Joshua L. Miner, Dean of Admissions; Jean C. McKee, Admissions Coordinator; Meredith Price, Associate Dean of Admissions; Grace H. Taylor, Administrative Assistant; Robert P. Hulburd, Admissions Officer; Jan Burton, Admissions Officer. Not pictured: Frank F. DiClemente, Liaison with Alumni Representatives; James F. Ventre, Admissions Officer.

4 STEPS TO BE COMPLETED FOR APPLICATION

1 Submit the Preliminary Application Card and the non-refundable \$20 fee as soon as possible. (Checks are payable to the Trustees of Phillips Academy.) **Application will not be considered unless the Preliminary Application Card and Fee are received.**

2 Complete the Personal Interview Requirement. Candidates must complete the required interview by February 1. Candidates are urged to schedule interviews in either the spring, summer, or early fall of the year before they intend to matriculate. It is in everyone's best interests for the interview to take place as early as practicable. A visit to the Academy is desirable as it gives candidates a chance to have questions answered and to see the school. Please allow two hours for the tour and interview and be sure to dress with the weather in mind. **Candidates who cannot visit the Academy are themselves responsible for arranging an interview with an Alumni Representative.** (See page 54.)

3 Return the Final Application Forms. Final application forms, mailed in mid-November to candidates who have filed preliminary applications, should be completed and returned as soon as final or mid-semester grades are available for the fall term. Priority consideration is given to applications completed by the advertised deadline of February 1. ("Late applicants" should return forms immediately.) Teacher recommendations should be from *current* teachers.

4 Take the Secondary School Admissions Test. (12th Grade or Postgraduate candidates are not required to take the SSAT. See next page.)

Secondary School Admissions Test

The Bulletin of Information for Candidates, published by the Educational Testing Service, Princeton, NJ 08540, will be sent by Andover to all 1983-84 candidates who have filed a Preliminary Application. This Bulletin describes the Secondary School Admissions Test, which will be given on the following dates:

December 10, 1983	March 3, 1984
January 21, 1984*	April 28, 1984*
	June 16, 1984

*International administration

Candidates are strongly urged to take the SSAT administered in December, 1983. (The December tests will not be given in foreign countries.) Otherwise, the candidate should take the January, 1984 administration.

Early Decision

Andover does not participate in any early decision plan for admissions.

Twelfth Grade or Postgraduate Candidates

Instead of the Secondary School Admissions Test, Senior and Postgraduate candidates must take the Preliminary Scholastic Aptitude Test or the College Board Scholastic Aptitude Tests (C.E.E.B., Box 592, Princeton, NJ 08540).

Postgraduates are full-fledged members of the Senior Class and are eligible for all school activities. Because of their academic credits, they frequently have maximum flexibility in course selection.

If you have a question:

About Andover's admissions or applications procedures, call or write the Admissions Office.

About an appointment: call or write the Appointment Secretary, Admissions Office.

To request a catalog, call or write the Admissions Office:

Admissions Office

Phillips Academy

Andover, Massachusetts 01810

Telephone: (617) 475-3400 x 196

Joshua L. Miner, Dean of Admissions

Office hours: Monday through Friday, 8:30 a.m. to 4:30 p.m.

Saturday, 8:30 a.m. to 12:00 noon

"Youth from Every Quarter"

The School's *Constitution*, written in 1778, states that Andover "shall be ever equally open to Youth of requisite qualifications from every quarter." With this principle in mind, the basic requirement for admission to Andover today continues to be evidence of sound character and strong academic achievement. The school is especially interested in candidates who demonstrate maturity and concern for others in addition to high performance in particular studies or activities. Valuing diversity in its student body, the school seeks to bring together a community from all parts of the country and from many nations.

The Admissions Committee selects from over 3,500 candidates the 440 most promising and deserving young people. The school's endowment covers approximately one-third of the cost of an Andover education. Therefore, in fact, every student receives financial aid. In addition, thanks to the generosity of a large number of alumni and friends, further financial assistance is available (see Financial Aid Section, page 53).

School Costs and Financial Aid

Tuition and Fees, 1983-1984

The annual charge for 1983-84 is \$8900 for boarding students and \$6750 for day students.

	<i>Boarding</i>	<i>Day</i>
Tuition	\$5500	\$5500
Room	1650	—
Meals	1300	850
Athletics and Activities	250	250
Health	<u>200</u>	<u>150</u>
Total	\$8900	\$6750

Day Students

Day students must live in Andover, North Andover, North Reading, Methuen or Lawrence.

Phillips Academy admits students of any sex, race, color, national and ethnic origin to all the rights, privileges, programs and activities generally accorded or made available to students at the school. It does not discriminate on the basis of sex, race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

To reserve a student's place for a given school year, a deposit in the amount of \$200 must be received by May 1, in the case of a returning student, or by the acceptance deadline in the case of a new admission. This payment applies only as a credit to the school year's final scheduled billing. It is non-refundable under any circumstances.

One-half of the above tuition and fees is payable on August 1, and one-half, less the deposit, on December 1.

An alternative is the use of the Insured Tuition Payment Plan, arranged with a private agency. Information about this alternative and an application form are sent to the parents before the first bill is due.

No rebate will be made against the amount of the installment due on August 1 for any student who for any reason is dismissed or withdrawn after registration in the fall. No rebate will be made against the installment due on December 1 for any student who is dismissed or withdrawn after returning to school at the beginning of the winter trimester.

These charges cover instruction, board, room (including basic furniture), physical training and most athletic privileges, use of laboratory equipment and material, admission to all authorized athletic contests and most authorized entertainments at George Washington Hall or elsewhere on campus, including the Saturday evening motion pictures.

The school charges do not include tutoring, language training, special instruction in music or certain athletics, materials fees for art courses, medical expenses, laundry, textbooks, dues to school organizations or breakage and damage to school property. The school charges do not include cost of participation in the Washington Intern Program, School Year Abroad, or other off-campus programs. The school provides uniforms and most athletic equipment. Students are required to bring their own footwear and urged to bring along whatever other personal athletic equipment they already possess. Bills for items not included in the school charges may be rendered at any time during the school year.

All charges must be paid by their due date in order to assure a student's place at the Academy. Students with past-due bills may be terminated at

any time. The diploma of the Academy will not be awarded to Seniors whose school accounts are not paid in full by June 1.

Other Expenses

As a rough guide to parents in budgeting for the total expected expenses of each academic year, the following low-average approximations of extras are given:

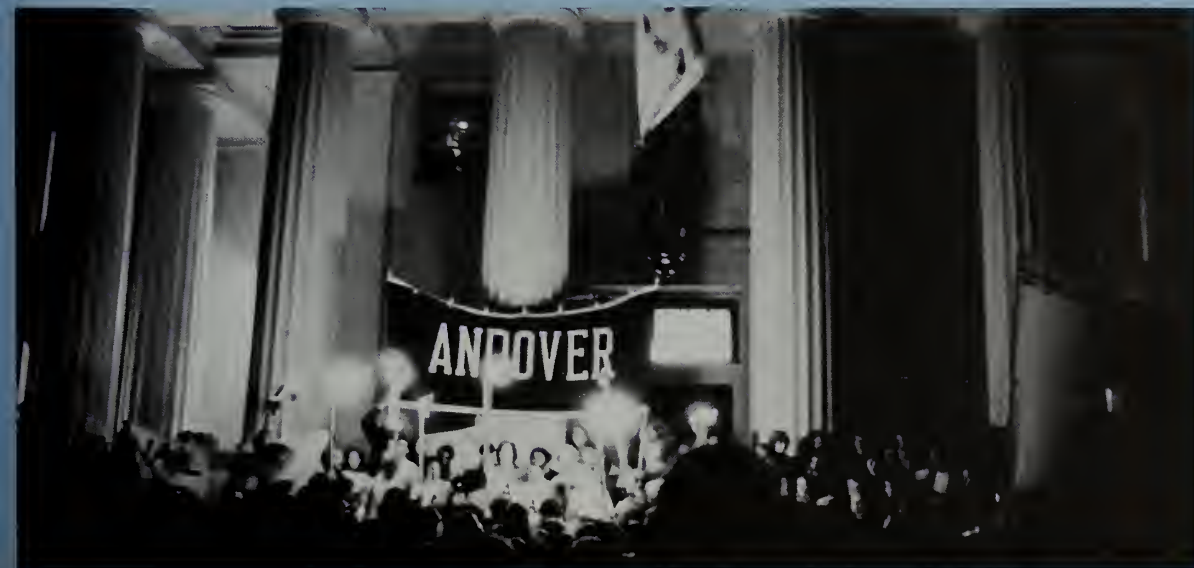
	According to home location
Travel	
Athletic Equipment	\$175
Laundry and Cleaning	300
Medical Insurance (optional)	35
Books and Supplies	450
Dues, publications and charitable contributions	75
Breakage Deposit (refundable)	100
Miscellaneous, including spending money	300

Financial Aid: The Andover Plan

Phillips Academy will do its best to see that no admitted student is denied the chance to attend due to inability to finance his or her education here. To that end, the Academy provides over \$2,500,000 in direct financial aid each year, in addition to endowment support for all students. Under the comprehensive Andover Plan, families with incomes of up to \$75,000 a year may qualify for some form of direct assistance from the Academy.

The Andover Plan consists of three parts:

- I. General support of all students' educational cost, principally through income from the school's \$85,000,000 endowment, a product of the generosity of past Andover graduates, parents and friends. This income pays more than 34 percent of the real costs of the educational services Andover actually offers.
- II. Scholarships supplemented, as necessary, by a Student Loan Plan, for qualifying students, ranging from several hundred dollars to total costs, as needs warrant and funds permit, based upon information provided through the School Scholarship Service in Princeton, NJ. Repayment of low interest Student Loans begins four years after graduation, with an additional four years allowed



for completion. Each family indicating a need for assistance on the Preliminary Application Form will be mailed a Parents' Financial Statement which is processed by the School Scholarship Service in Princeton, NJ. *All forms must be completed by January 15th. All awards are reviewed annually and a Parents' Financial Statement must be filed each year if continued aid is needed.* In addition, parents are asked to submit to the Academy a current IRS form 1040 with appropriate schedules.

Requests for aid filed after the January 15 deadline may not be processed in time to be included in the initial allotment of Scholarship funds. Requests filed after January 15 must await subsequent availability of scholarship monies.

- III. A new Parent Loan Plan available, at a modest rate of interest, to families in the \$30,000 to \$75,000 income range, as their needs require, with preference given to students entering 9th and 10th grades. Repayment of these loans begins immediately, but repayment of the principal is deferred during the students' college years and then continues for two additional years.

Divorced or Separated Parents

Because financial aid is based on a family's ability to meet the cost of education at Phillips Academy, the resources of both natural parents must be considered in cases where a divorce or separation has taken place. This information should be provided on the Parents' Financial Statement which is processed by the School Scholarship Service in Princeton, New Jersey. The availability of complete information from both parents is essential to assure a fair assessment of the family contribution. Lack of this information may result in no awarding of aid or an arbitrarily low financial aid package.

The combination of general endowment support with the programs of Scholarships for low income students, Scholarships and Student Loans for a broad spectrum of need, and Parent Loans for middle and upper income families gives Andover the flexibility to provide maximum assistance to families seeking an Andover education.

Alumni Representatives

While it is advisable from the student's point of view to visit the school, distance frequently render a visit impractical. When this is the case, the candidate should write or telephone for an interview with the most conveniently located Alumni Representative. (Please see list on page 55.) When you arrange for an interview with an Alumni Representative, please notify the Andover Admissions Office of the date of the interview and the name of the interviewer. This procedure will help us keep your records up to date. A candidate unable to arrange for an Alumni Representative Interview should communicate with the Admissions Office for assistance.

Admissions Travel Schedule

During the fall term Admissions Office representatives plan to be in the following areas:

Minneapolis/Atlanta/Miami
Montreal
New York City/Brooklyn
Denver/Los Angeles/San Francisco
Chicago/Detroit/Cleveland/St. Louis
Washington, D.C./Baltimore
North Carolina/Philadelphia
Texas

ALABAMA

Birmingham

A. Henry Gaede, Jr. '57
Bradley, Arant, Rose & White
1400 Park Place Tower 35203
(205) 252-4500

Mobile

David F. Dean, M.D. '56
612 Montclair Way West 36609
(205) 661-0123

ALASKA

Anchorage

John K. Brubaker '55
Delaney, Wiles, Hayes,
Reitman & Brubaker
1007 W. 3rd Ave. 99504
(907) 279-3581

Fairbanks

Kelly A. McMullen '66
Star Route Box 10088 99701
(907) 479-2964

ARIZONA

Litchfield Park

George T. French '29
P.O. Box 579
609 N. Litchfield Rd. 85340
(602) 935-3216

Phoenix

Mrs. L. Don (Geraldine Treadway)
Miller '47
Arizona Public Service, Station 5629
P.O. Box 21666 85036
(602) 271-2983

Tucson

John S. Greenway '42
2200 E. Elm Street 85719
(602) 325-1541
Prof. Richard L. Morse '53
1939 E. 3rd St. 85719
(602) 884-8860
Donald B. Rollings '70
363 S. Meyer 85701
(602) 622-7984/623-4091

ARKANSAS

Forrest City

Henry Loeb III '39
Growers Equipment Inc.
125 Hill St. 72335
(501) 633-1410

Little Rock

Mose Smith III, M.D. '48
5326 West Markham St. 72205
(501) 664-1527



CALIFORNIA

Beverly Hills

Thompson K. Vodrey '52
1529 Gilcrest Dr. 90210
(213) 275-5529

Corona Del Mar

John E. Kidde '64
3907 Inlet Isle Dr. 92625
(714) 640-7075

Fresno

Geoffrey M. Brittin, M.D. '52
St. Agnes Hospital
1303 E. Herndon Ave. 93710
(209) 449-3120

Graton

William D. Lynch '38
P.O. Box 498 95444
(707) 823-1806

Huntington Beach

James B. Blackmon '57
McDonnell Douglas Astronautics
5301 Bolsa Ave. 92647
(714) 896-4007

LaJolla

Kevin O'Brien '71
Dean Witter & Co., Inc.
1020 Prospect St. 92038
(619) 459-2331

Livermore

Patrick J. O'Hern '65
Lawrence Livermore
National Laboratory 94550
(415) 422-1960

Los Altos

Philip J. Kann '71
327 Lunada Ct. 94003
(415) 948-8634

Los Angeles

David A. Cathcart '57
Gibson, Dunn & Crutcher
333 S. Grand Ave. 90071
(213) 229-7308

Robert J. Cathcart '64
Allen, Matkins, Leck, Gamble
& Mallory
515 S. Figueroa St., 8th Floor
90071 - 3398
(213) 622-5555

George W. Davis III, M.D. '52
4616 Kenison Ave. 90043
(213) 294-1226

Russell K. Decker '56
Decker Management Systems
515 S. Flower St., Suite 325 90071
(213) 489-2170

Walter L. Farley, Jr. '28
12300 1st Helena Dr. 90049
(213) 476-1028

Mrs. Felix (Elizabeth Gorsuch)
Figus '42

818 N. Doheny Drive #703 90069
(213) 550-1971

Trevor A. Grimm '56
Kaplanis & Grimm
551 S. Oxford Ave. 90020
(213) 380-0303

Tim McChristian '73
4589 Via Marisol #171 90000
(213) 254-5843

Christopher L. Rafferty '66
Union Venture Corporation
445 S. Figueroa St. 90071
(213) 687-5587

Marysville

Harold S. Edwards '28
770 Ramirez Rd. 95901
(916) 743-5513

Peter Lee '60
1100 Trinity Drive 94025
(415) 854-3207

Miranda

Craig B. Reynolds '73
P.O. Box 495 95553

Oakland

Jonathan Harris '78
5701 LaSalle Ave. 94611
(415) 339-1393

Mrs. Harold (Deborah Little)
Paris '66
326 Athol Ave. 94606

Alumni Representatives

Oakland

Thomas E. Pollock III '61
6039 Bullard Dr. 94611
(415) 398-3825

Palo Alto

Henry E. Riggs '53
634 Lowell Ave. 94301
(415) 497-9325

Donald A. Way '63
Thoits Insurance
541 Cowper St. 94301
(415) 324-0606

Pasadena

Graeme Henderson '52
1613 Vista Lane 91103
(213) 449-6152

Judy Mustille '66
1146 Wellington Ave. 91103
(213) 793-4964

Riverside

Peter C. Parsons '55
Riverside County Publishing Co.
P.O. Box 8368 92515
(714) 689-1122

San Diego

Norman R. Allenby '51
Hillyer & Irwin
530 "B" St. Suite 1400
92101 - 4479
(619) 234-6121

San Francisco

Hobart M. Birmingham, Jr. '62
Bank of America Bldg.
555 California St., 34th Floor 94104
(415) 391-4500
Patrick A. Cathcart '64
Hancock, Rothert & Bunshoft
Four Embarcadero Center 10th Floor
94111
(415) 981-5550
Carey Orr Cook '61
Robertson, Coman & Stephens
One Embarcadero 31st Floor 94111
(415) 781-9700
Alan L. Fox '60
Stauffer Chemical Co.
636 California St. 94108
(415) 544-9303
William M-S Lee '51
Lee & Fan
580 Market St. 94104
(415) 433-4412

Samuel R. Miller '66
Morrison & Foerster
One Market Place
Spear Street Tower 94105
(415) 777-6230

Martin Quinn '60
Rogers, Joseph, O'Donnell & Quinn
505 Sansome St. 14th Floor 94111
(415) 956-2828

John M. Reynolds '65
335 Moscow St. 94112
(415) 585-5944

H. Leonard Richardson '45
1869 California St. #2 94109
(415) 776-1355

William D. Sherman '60
Bay Area Alumni Rep Coordinator
Pillsbury, Madison & Sutro
225 Bush St. 94104
(415) 983-1000

William W. Sterling '57
Heller, Ehrman, White & McAuliffe
Suite 3000
44 Montgomery St. 94104
(415) 772-6084

San Rafael

William S. Creighton '39
32 Woodoaks Dr. 94903

Santa Ana

Reginald D. Barnes, Jr. '58
Crysen Services, Inc.
825 Parkcenter Drive 92705
(714) 835-6505

Santa Barbara

Jonathan E. Mudge '75
980 Canon Rd. 93110
(805) 682-0844

Santa Rosa

Donald M. Reynolds '38
5053 Morocco Ave. 95405
(707) 538-5656

Sunnyvale

Wayne L. Earl '57
Woodside Electronics Corp.
479 Macara Ave. 94086
(404) 773-9771

Torrance

Sam Suitt '57
1747 Maple Ave. #73 90503
(213) 320-7864

Whittier

Carlos F. Sanchez '75
Security Pacific National Bank
333 S. Hope St. H30-2 90071
(213) 613-6978

COLORADO

Aspen

John P. McBride '56
105 Pacific Ave. 81611
(303) 925-2102

Colorado Springs

Mrs. William (Josephine Hartwell)
Boddington '41
1433 Alamo Ave. 80907
(303) 634-5679

Denver

Anthony T. Accetta '61
Steele Park
50 S. Steele St. Suite 420 80112
(303) 321-2222

William W. Grant '49
545 Race St. 80206
(303) 321-1566

David C. Wilhelm '38
Wilhelm Company
Box 22856 80222
(303) 321-1200

Englewood

Mrs. Ned (Margot Kent)
Timbel '75
6470 East Long Circle North 80112
Bus: (303) 830-4573
Res: (303) 771-2035

Glenwood Springs

Father George P. Pierce '49
St. Barnabas Episcopal Church
546 Hyland Park Dr. 81601
(303) 945-6423

Hudson

John F. Malo '40
P.O. Box 248 80642

Littleton

William R. Rapson '63
33 Fairway Lane 80123
(303) 794-1785

CONNECTICUT

Darien

George H. Webb, Jr. '50
7 Sherry Lane 06820
(203) 655-2333

David E. Winebrenner '58
27 Briar Brae Rd. 06820
(203) 323-1874

Fairfield

Kenneth D. Krier '68
75 Lalley Blvd. 06430
(203) 255-2402

Greenwich

Gerard E. Jones '55
One Deer Lane 06830
(203) 869-1441

Roger S. Seymour '44
50 Porchuck Rd. 06830
(203) 622-9093

Westport

Robert B. Simonton '50
25 Woody Lane 06880
(203) 227-4060

DELAWARE

Wilmington

Mrs. Robert (Ellen Huntington)
Bryant '65
2309 Saymore Rd. 19803
(302) 658-3004

Mrs. Reeves (Mary Lou Miller)
Hart, Jr. '47
18 Briar Rd., Briarwood 19803
(302) 764-0361

DISTRICT OF COLUMBIA

Washington

Douglas O. Adler '70
Bowman Conner Touhey & Thornton
2828 Pennsylvania Ave., N.W. 20007
(202) 965-7600

George Beatty '50
Lee, Toomey & Kent
1200 18th St. N.W. 20036
(202) 457-8528

Stephen B. Clarkson '55
Pierson, Ball & Dowd
1200 18th Street N.W. 20036
(202) 331-8566

Andrew P. Ireland '48
House of Representatives
2446 Rayburn HOB 20515
(202) 225-5015

Cornelius B. Kennedy '39
4801 Mass. Ave. N.W.
Suite 400 20016
(202) 362-6315

FLORIDA

Coral Gables

Carlos M. delaCruz '59
Miami National Bank
300 Aragon Ave. 33134
(305) 448-0800

Gainesville

Richard M. Cohen '61
Santa Fe Community College
3000 N.W. 83rd St. 32606
(904) 377-5161

Jacksonville

Arthur W. Milam '45
Mahoney, Hadlow & Adams
100 Laura Street, Suite 800 32202
(904) 354-1100

Robert D. VanCleve, M.D. '50
Riverside Clinic
2005 Riverside Ave. 32204
(904) 384-2321

Miami

Mrs. Constantinos (Marion
Badoian) Emmanuel '54
6971 S.W. 134th St. 33156
(305) 253-6363

David J. Williams II '38
E.F. Hutton
13815 S.W. 84th St. 33134
(305) 448-5600

Naples

Robert W. Hattemer '49
Powell & Yanson Inc.
4444 Tamiami Trail N. 33940
(813) 263-3300

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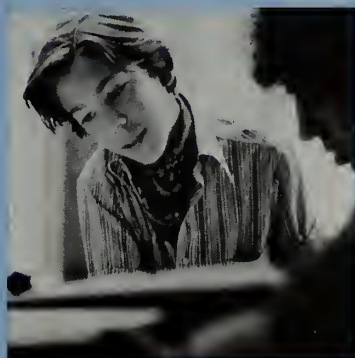
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(715) 832-4908

Madison

William F. Dove '54
4130 Mandan Crescent 53711
(608) 238-0591

Middleton

John T. Mendenhall, M.D. '31
4617 Foxbluff Lane 53562
(608) 233-8814

Milwaukee

John S. Holbrook, Jr. '57
Quarles & Brady
780 N. Water Street 53202
(414) 277-5000

Racine

John H. Batten III '31
3030 Michigan Blvd. 53402
(414) 639-3005

WYOMING

Buffalo

J. Adrian Padon, Jr. '39
181 No. Adams Apt A 82834
(307) 684-5795



Story

Maurice Leon, Jr. '42
Box 400 82842
(307) 683-2302

Wilson

Meridan Bennett '45
995 North Green Lane
P.O. Box 33 83014
(307) 733-4920

AFRICA

Cameroon

Christopher D. Costanza '50
American Embassy
Yaounde BP 817
Tel: 23-40-14

AUSTRIA

Vienna

David J. Ordoobadi '73
The Opec Fund
P.O. Box 955
1011 Wien 1011
222-531664 Ext 224

BELGIUM

Brussels

Alan S. Calnan '47
c/o JEMA
Rue Docteur De Meersman, 37
1070 Brussels
Tel: (02) 520.45.76

Mrs. Eric A. (Jacqueline VanAubel)
Janssens '63
LaHetraie 213
Chaussee delaHulpe 1170
02/672 47 52
02/648 45 48

BERMUDA

Pembroke

Hugh C. Masters '40
Queens Cove B-3
5-56
(809) 295-2939

Hamilton

Clarendon H. Masters '75
P.O. Box 821
Hamilton 5
(809) 295-2939

CANADA

Calgary, Alberta

Thomas B. Hewitt II '39
Hewitt Oil (Alberta) Ltd.
915 Gulf Canada Square
401 Ninth Ave. S.W. T2P 3C5
(403) 262-7707

Kitchener, Ontario

Donald M. MacFarlane '63
102 Hearth Crescent N2M 1G9
519-578-0192

Montreal, Quebec

Mrs. Timothy J. (Susan Waterous)
Wagg '56
426 Berwick Avenue H3R 1Z9
(514) 733-5195

Ottawa, Ontario

James S. Bomba '48
Bell-Northern Research
3500 Carling Ave. K1Y 4H7
(613) 596-2373

Toronto, Ontario

Geoffrey D. Perry '65
207 Erskine Ave. M4P 1Z5
(416) 482-1358

James C. Taylor '56
Morgan Stanley Canada LTD
150 York St. M5H 3S5
(416) 365-6255

Einar J. Westerlund '58
Westerlund-Emond Limited
60 St. Clair Ave. East Suite 406
M4T 1N5
(416) 961-9441

CHINA

Hong Kong

William S. Cheng '60
Commence Company LTD
1408 Garley Bldg.
233 Nathan Road
Kowloon, H.K.
Tel: 3-688241

Harland Chun '72
Chromatic Pen (H.K.) Ltd.
Hua-Hsia Bldg. 12th Floor
64-66 Gloucester Rd.
Tel: 5-274024

Bryan G. Miller '66
Baker & McKenzie
1401 Hutchison House
Tel: 5-264181

John T. Winebrenner '60
R.J. Reynolds Tobacco Co.
(HK) Ltd.
7th Floor Sun Hung Kai Center
Tel: 5-757201

DOMINICAN REPUBLIC

Santa Domingo

Gustavo A. Tavares '46
Tavares Industrial
P.O. Box 146-2
(809) 533-2121

ENGLAND

London

David N. Batchelder '53
Queen Mary College
University of London
Dept. of Physics
Mile End Road E1 4NS
01-980-4811 Ext. 340

Dr. Paul E. M. Fine '58
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Clinton J. Kendrick '61
Alliance Capital Management
International, Inc.
Buckingham House
62-63 Queen St.
EC4R 1AD
Tel: (011-441) 248-8881

John A. Mayer, Jr. '58
Morgan Guaranty Ltd.
30 Throgmorton St.
EC2N 2NT
Tel: 600-7545

FRANCE

Paris

Patrick G. Nollet '51
CISI
35 Boulevard Brune
75680 Paris Cedex 14
Tel: (33.1) 545 83 57

HAITI

Port-au-Prince

Frederick C. Thomas '46
c/o United Nations
United Nations Development
Program
Boite Postale 557
(Grand Antilles)
Tel: 2-5689

ITALY

Ivrea

David Olivetti '60
Via Monte Leggero 5
10015
Tel: 0125-40270

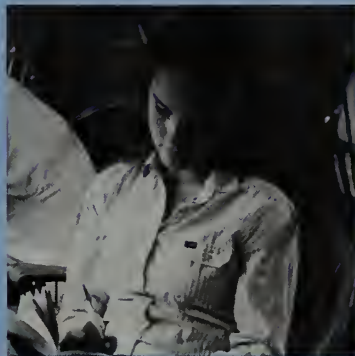
JAPAN

Hyogo-ken

Dr. Kiyoshi Kondo '64
2-129-1 Kurumazuka
Itami-shi 664
Tel: 0727-77-5154

Tokyo

S. Steven Yamamoto '51
3-14-3, Shimo-Ochial, Shinjukuku
161
Tel: 03-951-6874



MEXICO

John F. Lynch '70
Industries Rolls-Royce, S.A.
Alemania 14
Mexico 21 D.F. 04040
Tel: (905) 689-1477

MOROCCO

Tangier

Joseph A. McPhillips III '54
The American School of Tangier
149, Rue Christophe-Colomb
Tel: 215 27; 215 28

NORWAY

Mrs. Kyran M. (Diane Sorota)
O'Dwyer '55
A/S Kristian Jebsens Rederi
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5015 Bergen-Dreggen

PUERTO RICO

Guaynabo

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Gardenville 00657

Penuelas

Arturo E. Valldejuly '57
Caribe Candle Corp.
Box 538 00724
(809) 836-1050

San Juan

Jorge R. Gonzalez '62
McConnell Valdes Kelley Sifre
Griggs & Ruiz-Suria
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Santurce

Samuel C. Dysart, Jr. '46
20 Washington St. Apt #8B 00907
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SOUTH AMERICA

Rio De Janeiro, Brazil

Mrs. Bruno (Josephine Shanklin)
Azambuja '58
Av. Delfini Moreira 830
Apto. 102 Leblon

Santiago, Chile

Sebastian Conde '76
Casilla 25-D
Tel: 2220063

Alumni Representatives

Quito, Ecuador

D. Chadwick Braggiotti '31
International Executive Service
Corps (IESC)
Box 4179 18 de Septiembre 213
Tel: 524 813 or 231 723

Caracas, Venezuela

Alberto J. Vollmer '42
C.A. de Servicios Alpasa
Centro Comercial Paseo Las
Mercedes
Pisa 3, Ruta 53
Las Mercedes
Tel: 921122

SWITZERLAND

Geneva

John J. Ryan III '45
J.J. Ryan & Sons, Inc.
c/o CISA 13, Avenue de Bude 1202
Tel: (022) 34 55 50

Pratteln

John R. Thompson '41
Firestone Schweiz
4133

Zurich

Heimeran von Stauffenberg '54
Im Braechli 56 Ch 8053

THAILAND

Bangkok

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VIRGIN ISLANDS

St. Thomas

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Thousand Islands Corporation
Franklin Bldg., Market Square
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Tel: (809) 776-1000

WEST GERMANY

W. Berlin

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AMK Berlin
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1000 Berlin 19
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Bochum

Edwin A. Hopkins '56
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0234 700 33 92

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2000 Hamburg 36

Munich

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Voice of America, European Bureau
Ludwigstrasse 2
8000 Munich 22
Tel: (089) 28-60-21

YUGOSLAVIA

Beograd

James L. Clunan '56
American Embassy
50, Kenza Milosa
11000 Beograd
Tel: (38-11) 645-655 X111



STATISTICAL INFORMATION for 1982-1983



In 1864 Shimeta Neesima left Japan as a stowaway on the clipper ship "Wild Rover" for America and sold his samurai sword for a Chinese New Testament. He was adopted by the shipowner, an Andover Trustee, was christened Joseph Hardy Neesima, graduated from Andover in 1867, later from Amherst and the Andover Theological Seminary, and became the first Japanese to be ordained a Congregationalist minister. Neesima returned to Japan to found The Doshisha, a great university in Kyoto dedicated to Japanese and Christian ideals. Doshisha recently celebrated its 100th birthday.

Geographical Distribution*

Alabama	2
Alaska	1
Arizona	1
Arkansas	1
California	73
Colorado	17
Connecticut	73
Delaware	1
District of Columbia	24
Florida	16
Georgia	8
Hawaii	2
Illinois	26
Indiana	8
Iowa	6
Kansas	4
Kentucky	3
Louisiana	4
Maine	11
Maryland	13
Massachusetts	459
Michigan	8
Minnesota	5
Mississippi	5
Missouri	8
Montana	2
Nebraska	4
Nevada	2
New Hampshire	25
New Jersey	37
New Mexico	3
New York	165
North Carolina	14
Ohio	21
Oklahoma	1
Oregon	3
Pennsylvania	23
Puerto Rico, USVI	5
Rhode Island	11
South Carolina	2
Tennessee	9
Texas	17
Vermont	12
Virginia	14
Washington	2
Wisconsin	8
Wyoming	1
Total U.S.	1160

*Based on country of residence, not citizenship.

Bahamas	1
Barbados	1
Canada	9
China, Peoples Rep. of	4
Colombia	1
France	4
Germany	4
Great Britain	1
Greece	1
Greenland	1
Hong Kong	3
Italy	3
Ivory Coast	1
Japan	2
Korea	3
Libya	1
Netherland Antilles	1
Norway	1
Saudi Arabia	2
Spain	5
Switzerland	1
Thailand	1
Tunisia	1
Venezuela	2
Yugoslavia	2
Total Foreign	56
SCHOOL TOTAL	1216

	<u>Girls</u>	<u>Boys</u>	<u>Total</u>
Seniors	169	231	400
Uppers	148	221	369
Lowes	121	179	300
Juniors	<u>54</u>	<u>93</u>	<u>147</u>
	492	724	1216
Total Boarding Students			955
Total Day Students			<u>261</u>
TOTAL			1216

College Matriculations for the Class of 1982

The Class of 1982 applied to 160 different colleges and matriculated at 85 colleges and universities across the country.

COLLEGE	AD- MITTED	MATRIC- ULATED	COLLEGE	AD- MITTED	MATRIC- ULATED
Amherst	14	3	New College	1	1
Bard	2	1	Univ. of NH	7	1
Barnard	24	10	New York Univ.	2	1
Bates	12	4	Univ. of N.C.	5	1
Boston College	10	1	Northwestern	24	3
Bowdoin	7	2	Oberlin	10	6
Brown	42	18	Ohio Wesleyan	8	2
Bucknell	4	2	Univ. of Penn.	34	5
Univ. of Calif.			Pomona	5	2
Berkeley	53	11	Portland Sch. of Art	1	1
Davis	1	1	Princeton	23	17
Santa Cruz	2	1	Purdue	3	2
Carnegie Mellon	5	1	Queens, Canada	1	1
Case Western Reserve	3	1	Reed	7	1
Univ. of Chicago	13	1	R.P.I.	6	1
Colby	11	3	Rice	3	1
Colgate	9	2	Univ. of Richmond	6	1
Colorado College	3	2	Univ. of Rochester	9	1
Univ. of Colorado	17	3	Rollins	1	1
Columbia	25	11	St. Lawrence	3	1
Conn. College	26	6	Sarah Lawrence	2	1
Cornell	25	15	Skidmore	5	2
Dartmouth	38	28	Smith	11	3
Denison	4	1	Stanford	18	12
Duke	18	4	Swarthmore	3	2
Emory	6	1	Trinity	22	3
Franklin & Marshall	2	1	Tufts	20	5
Georgetown	18	4	Tulane	10	2
Harvard	46	32	Union	4	2
Harvey Mudd	2	1	US Air Force Acad.	1	1
Haverford	5	2	US Naval Acad.	2	2
Hobart	3	1	Vanderbilt	6	3
Holy Cross	7	2	Vassar	14	4
Ill. Inst. Of Tech.	1	1	Univ. of Virginia	12	6
Johns Hopkins	28	6	Washington Univ.	5	1
Kenyon	8	1	Wesleyan	30	12
Lafayette	7	4	Wheaton	5	1
Lewis & Clarke	3	2	William & Mary	7	4
Macalester	4	1	William Smith	4	2
MIT	6	2	Williams	7	5
Univ. of Mass.	9	2	Worcester PolyTech	2	1
Univ. of Michigan	22	3	Yale	37	27
Middlebury	21	7			
Mount Holyoke	5	3			

College Admissions

Admission to colleges is not based on a student's mere presence at Andover, but is based on how well the student has used this experience. All selective colleges exercise judgments relative to factors over and above academic ability in selecting a freshman class. While some of these factors relate to exceptional talents in one area or another, others are related to diversity in background and educational objectives.

The college admissions picture is entirely different and infinitely more complex now than it was in past decades. Competition for admission to selective colleges is rigorous, and Andover students are encouraged to apply across a range of choices to colleges with varying degrees of selectivity. The one constant in all of this should be a real desire to educate oneself. To this end the College Counseling Office works with the class as a whole and with each candidate to help each one draw up a list of colleges that makes sense.

Phillips Academy seniors go to college well prepared for the academic program and social experience that lies ahead.





TRUSTEES

MELVILLE CHAPIN '36
A.B., J.D.
President
elected 1974
elected President, 1981
Cambridge, Massachusetts

DONALD W. McNEMAR
B.A., M.A., Ph.D.
Clerk
elected 1981
Andover, Massachusetts

CHARLES APPLETON MEYER '35
A.B.
Treasurer
elected 1969
elected Treasurer 1976
Lake Forest, Illinois

JOHN USHER MONRO '30
A.B.
elected 1958
Birmingham, Alabama

ROBERT LIVINGSTON IRELAND III '38
A.B., LL.B.
elected 1960
New York, New York

GERARD PIEL '33
A.B., D.Sc., Litt.D., L.H.D., LL.D.
elected 1969
New York, New York

WILLIAM WADE BOESCHENSTEIN '44
S.B.
elected 1971
Perrysburg, Ohio

CAROL HARDIN KIMBALL '53
A.B.
elected 1974
New York, New York

RICHARD LEE GELB '41
A.B., M.B.A.
elected 1976
New York, New York

STEPHEN BRADNER BURBANK '64
A.B., J.D.
elected 1980
Philadelphia, Pennsylvania

ELIZABETH PARKER POWELL '56
B.A., M.A., M.B.A.
elected 1980
Wellesley Hills, Massachusetts

FREDERICK W. BEINECKE, II '62
B.A., J.D.
elected 1980
New York, New York

THOMAS H. WYMAN '47
B.A.
elected 1980
New York, New York

Alumni Trustees

ALEXANDER B. TROWBRIDGE '47
A.B.
elected 1979 for three years
Washington, D.C.

PHILIP M. DRAKE '43
A.B., L.L.B.
elected 1980 for four years
Greenwich, Connecticut

ANNE OLIVER JACKSON '53
A.B.
elected 1980 for four years
Sewickley, Pennsylvania

WILLIAM W. ROSENAU '47
B.A.
Ex Officio as President of the
Alumni Association
elected 1980 for two years
White Plains, New York

CLINTON J. KENDRICK '61
B.A., M.B.A.
Ex Officio as Chairman
of the Alumni Fund
elected 1981 for two years
Bedford, New York

Trustees Emeriti

SUMNER SMITH '08
A.B.
1956-1960
Lincoln, Massachusetts

HENRY WISE HOBSON '10
D.D., LL.D.
1937-1966 (President 1947-1966)
Cincinnati, Ohio

CHARLES STAFFORD GAGE '21
A.B., A.M.
1952-1976 (Treasurer 1966-1976)
New Haven, Connecticut

PHILIP KIRKHAM ALLEN '29
A.B.
1969-1980
Andover, Massachusetts

GEORGE BUSH '42
A.B.
1967-1980
Washington, D.C.

DONALD HOLMAN McLEAN, JR. '28
A.B., LL.B.
1958-1981 (President 1968-1981)
Andover, Massachusetts

JOHN LEWIS COOPER '31
A.B.
1968-1981
Dover, Massachusetts

HEADMASTER'S OFFICE

DONALD WILLIAM McNEMAR
Headmaster
B.A., M.A., Ph.D.

PETER QUACKENBUSH McKEE
Associate Headmaster
A.B., Ed.M.

SARAH M. GATES
Assistant to the Headmaster
A.B.

JANE H. MUNROE
*Executive Secretary to the
Headmaster*

OFFICE OF THE DEAN OF FACULTY

JOHN RICHARDS, II
Dean of Faculty
A.B., M.A.T.

WILLIAM FRANKLIN GRAHAM
Clerk of the Faculty
S.B.

JOAN C. MURTAGH
Secretary to the Dean of Faculty

OFFICE OF THE DEAN OF STUDIES

PHYLLIS WENDOVER POWELL
Dean of Studies
A.B., A.M.

HERBERT HARRY MORTON, III
Registrar
A.B.

DAVID A. PENNER
Scheduling Officer
A.B., M.A.

JOAN F. SCHLOTT
Recorder
B.S.

DEANS OF THE RESIDENTIAL CLUSTERS

DAVID OWEN COBB
Dean of Residence
A.B., A.M.

CARROLL WESLEY BAILEY
Abbot Cluster
A.B., J.D.

STEPHEN DOUGLAS CARTER
Pine Knoll Cluster
ScB., M.A.L.S.

CAROL CAMERON RICHARDS
Rabbit Pond Cluster
A.A.

JONATHAN A. STABLEFORD
West Quadrangle South Cluster
A.B., M.A.T.

SYLVIA L. THAYER
Flagstaff Cluster
A.B.

JAMES ROBERT WILSON
West Quadrangle North Cluster
B.S., A.M., Ph.D.

BUSINESS OFFICE

GEORGE A. NEILSON, JR.
Business Manager
B.S., M.Ed.

SUSAN G. COMSTOCK
Assistant Business Manager
B.A., M.C.R.P.

DONALD HENRY BADE
Comptroller
B.B.A.

OFFICE OF ADMISSIONS AND FINANCIAL AID

JOSHUA LEWIS MINER
Dean of Admissions
A.B.

MEREDITH PRICE
Associate Dean of Admissions
A.B., M.A.T.

JOHN C. McCLEMENT
Director of Financial Aid
A.B., M.Ed.

JEAN C. McKEE
Admissions Coordinator
A.B.

JAN BURTON
Admissions Officer
B.A.

REBECCA CARR
Admissions Officer
B.A.

FRANK F. DiCLEMENTE
Liaison with Alumni Representatives
S.B.

ROBERT P. HULBURD
Admissions Officer
A.B., M.A.

THOMAS G. SPEERS, III
Admissions Officer
B.A.

FACULTY

The date following the name indicates the year the instructor joined the Andover faculty. This list reflects the faculty for the 1981-82 school year.

DONALD WILLIAM McNEMAR
(1981)

Headmaster; Instructor in History and the Social Sciences
B.A., Earlham; M.A. Princeton;
Ph.D. Princeton

PETER QUACKENBUSH McKEE
(1947)

Associate Headmaster; Chairman Physics Dept.; Chairman Science Division, Instructor in Physics on the Donna Brace Ogilvie Teaching Foundation

B.A. Middlebury; Ed.M. Harvard

DOROTHY Y. JUDD (AA 1948)

Instructor in Spanish
B.S. William and Mary;
M.A. Columbia; M.A. Middlebury

GORDON GILMORE BENSLEY
(1949)

Instructor in Art on the Ammi Wright Lancashire Foundation
A.B. Yale

JOHN RICHARD LUX (1949)

Chairman Mathematics Department, Instructor in Mathematics on the Walter Scott Leeds Teaching Foundation

B.S. Pennsylvania State University; M.S. Ed. University of Pennsylvania

SHIRLEY J. RITCHIE (AA 1950)

Assistant Director of Physical Education, Instructor in Physical Education

B.S. Trenton State College

FREDERIC ANNESS STOTT

(1951)
Secretary of the Academy
A.B. Amherst

PHILIP BROWNLIE WELD (1951)

Chairman Chemistry Department, Instructor in Chemistry and Physics on the George Peabody Foundation

B.E. Yale; M.S. University of Michigan

WILLIAM FRANKLIN GRAHAM
(1952)

Clerk of the Faculty; Instructor in Mathematics

S.B. University of Michigan

FRED HAROLD HARRISON (1952)

Instructor in History and the Social Sciences on the Samuel Harvey Taylor Foundation

A.B. Yale; A.M. Trinity

JOHN CLAIBORNE McCLEMENT
(1952)

Instructor in Mathematics on the Cecil F.P. Bancroft Foundation; Director of Financial Aid

A.B. Yale; M.Ed. University of Pittsburgh

JOSHUA LEWIS MINER, III (1952)

Dean of Admissions
A.B. Princeton

JAMES HAROLD COUCH (1953)

Instructor in Spanish
A.B., M.A. University of Wyoming

SHERMAN FREDERICK DRAKE (1953)

Instructor in Mathematics on the Emilie Belden Cochran Foundation
B.S. U.S. Naval Academy; Ed.M. Boston University

EDMOND EMERSON HAMMOND,
JR. (1953)

Instructor in Mathematics on the Jonathan French Teaching Foundation

S.B. Haverford; Sc.M. Brown

LOUIS JOHN HOITSMA, JR. (1953)

Instructor in Mathematics
B. S., Ed.M. William and Mary

ROBERT PENNIMAN HULBURD (1953)

Admissions Officer
A.B. Princeton; M.A. Middlebury

ROBERT EDWIN LANE (1955)

Instructor in Latin and Russian on the Alfred Ernest Stearns Foundation
B.A., M.A. University of California at Berkeley

HAROLD HOLMES OWEN, JR. (1955)

Instructor in English and Theatre
A.B. Amherst; M.A. University of New Hampshire

THOMAS JOSEPH REGAN (1955)

Instructor in English on the Frederick W. Beimecke Teaching Foundation
B.A. Yale; M.A. Boston University

Faculty

FRANK McCORD ECCLES (1956)
Instructor in Mathematics on Independence Teaching Foundation Endowment

B.S.M.E. Princeton; M.A. Harvard

HARRISON SCHUYLER ROYCE, JR. (1956)

Instructor in History and the Social Sciences

A.B. Amherst; M.I.A. School of International Affairs, Columbia

GERALD SHERTZER (1957)

Instructor in Art

B.F.A., M.F.A. Yale

GEORGE WILLIAM BEST (1958)

Instructor in Mathematics

B.S. Union College; A.B. Boston University

CLEMENT MORELL (1958)

Instructor in Mathematics

B.A. Northern Michigan; M.A. University of Michigan; M.S. University of Illinois

JOHN RICHARDS, II (1959)

Dean of Faculty; Instructor in History and the Social Sciences on the Alfred Lawrence Ripley Foundation

A.B., M.A.T. Harvard

JOHN PATTEN CHIVERS (1960)

Chairman, German Department; Instructor in German

A.B. Wesleyan; A.M. Middlebury

CARL EDWARD KRUMPE, JR. (1960)

Instructor in Classics and History

A.B. Wabash College; A.M. Brown

THOMAS REES (1960)

Instructor in Chemistry

B.E., M.S., Ph.D. Yale

GEORGE HOWARD EDMONDS (1961)

Instructor in English

A.B. Amherst; Ed.M. Harvard

MARY SOPHIA MINARD (AA 1961)

Instructor in History and the Social Sciences

B.A. Smith; M.A.L.S. Wesleyan

ALFRED JAMES COULTHARD (1962)

Instructor in Physical Education

S.B. Calvin Coolidge

ROBERT ANDREW LLOYD (1962)

Instructor in Art on the Independence Teaching Foundation Endowment

B.A. Harvard; M.Arch. Harvard Graduate School of Design

ALANSON PERLEY STEVENS, III (1962)

Instructor in Russian and German

B.A. Dartmouth; M.A. Yale

THOMAS TOLMAN LYONS (1963)

Chairman, Department of History and the Social Sciences; Instructor in History and the Social Sciences on John Mason Kemper Foundation

B.A., M.A.T. Harvard

BARBARA McDONNELL (1963)

Acquisitions Librarian

A.B. Boston University; B.L.S. Simmons

MEREDITH PRICE (1963)

Associate Dean of Admissions;

Instructor in English

A.B., Amherst; M.A.T. Harvard

JEAN MARY ST. PIERRE (AA 1963)

Instructor in English

A.B. Wheaton; M.A. Columbia

ALEXANDER ZABRISKIE WARREN (1963)

Instructor in Mathematics

A.B. Harvard; M.A.L.S. Wesleyan

CHRISTOPHER CAPEN COOK (1964)

Director of the Addison Gallery of American Art; Instructor in Art

A.B. Wesleyan; M.F.A. University of Illinois

DANIEL DRETZKA OLIVIER (1964)

Instructor in French

A.B. Haverford; M.A. Middlebury

VINCENT PASCUCCI (1964)

Chairman Division of Modern

Language; Instructor in Classics

and Modern Languages on the

John Charles Phillips Foundation;

Chairman Italian Department

A.B., M.A. Columbia; Ph.D. Brown

AUDREY NYE BENSLEY (AA 1965)

Instructor in Art

RONN NELS MINNÉ (1965)

Instructor in Chemistry on the Martha Cochran Foundation

B.S., A.M. Northwestern; Ph.D. Harvard

ANGEL RUBIO Y MAROTO (1965)

Chairman, Spanish Department;

Instructor in Spanish on Elizabeth

Milbank Anderson Foundation

Titulo de Bachiller, Titulo del

Magisterio, Universitario,

Madrid; M.A. Washington

University

CRISTINA ALONSO RUBIO (AA 1965)

Instructor in Dance

Licensed by the Spanish Academy

of Performing Arts

NATHANIEL BALDWIN SMITH (1965)

Instructor in Mathematics

B.S.E. Princeton

M.A. Northwestern

HALE STURGES, II (1965)

Instructor in French

A.B. Harvard; M.A. Middlebury

THOMAS EDWARD CONE, III (1966)

Instructor in Biology

B.S. Trinity; M.A.T. Brown

MICHAEL EDWARD MOSCA (1966)

Director of Accounting

B.A., M.B.A. Boston University

DAVID ALBERT PENNER (1966)

Scheduling Officer; Instructor in Mathematics

B.A. Amherst; M.A. University of Maryland

JOHN GIBSON TOMLINSON (1966)

Director of Energy Conservation

B.S. U.S. Military Academy

KENNETH KELLY WISE (1966)

Chairman, English Department;

Instructor in English on the William M. Newman Teaching Foundation

B.A. Purdue; M.A. Columbia

JAMES LEIGHTON BUNNELL (1967)

Director of Summer Session; Instructor in History and the Social Sciences

A.B. University of the South;

A.M. Vanderbilt

JOSEPH BELLEAU WENNIK (1967)

Director of Athletics on the John H.

Castle, Jr. Instructorship; Instructor in German

B.A. Yale; M.A. Middlebury

HILDA STROOP WHYTE (AA 1967)

Instructor in Physical Science

B.S. Michigan State University;

M.S. Tufts

JAMES ROBERT WILSON (1967)

Dean of West Quadrangle North

Cluster; Instructor in Chemistry

B.S. Stanford; A.M., Ph.D. Harvard

SAMUEL IRVINE ALLISON

ANDERSON (1968)

Instructor in French

A.B. Harvard; Diplome d'etudes

Universite de Paris; A.M.

Columbia; M.A. Massachusetts;

M.A. Middlebury

DAVID OWEN COBB (1968)
Dean of Residence; Instructor in English

A.B. University of Maine;
A.M. Middlebury

FRANK LEE HANNAH (1968)
Instructor in Mathematics
A.B., A.M. Dartmouth

MARJORIE ALEXANDER HARRISON
(AA 1968)

*Instructor in Physical Education;
Director of the Work Program*
A.B. Connecticut College

ALOYSIUS JOHN HOBAUSZ (1968)
Director of the Audio-Visual Center
S.B. Puskas Telecommunication
Institute, Budapest

NICHOLAS VAN HOUTEN KIP (1968)
Chairman, Classics Department
Instructor in Classics

A.B. Princeton; M.A. Trinity

CATHERINE JEANNE KIRKLAND
(AA 1968)

*Chairman French Department;
Instructor in French on Richard A.
Lumpkin Bicentennial*
Instructorship

Licence es Lettres, Maitrise,
Sorbonne

SUSAN McINTOSH LLOYD (AA 1968)

*Instructor in History and the Social
Sciences and Music on Marguerite
Capen Hearsey Instructorship*

A.B., Radcliffe; M.A.T., Harvard

JOHN KENNEDY McMURRAY (1968)
*Chairman Art Department; Instructor
in Art*

B.A. Washington and Lee;
M.A.T. Harvard

RICHARD STOCKTON MacNEISH
(1968)

Archaeology Research Associate
A.B., M.A., Ph.D. University of
Chicago

CHARLES EMORY APGAR, III (1969)
Instructor in Physics

A.B. Earlham; M.A.T. Brown

SUSAN B. CLARK (AA 1969)
Instructor in Classics and History
A.B. Swarthmore; M.A. Yale

MARION FINBURY (AA 1969)
Director of College Counseling
A.B. Vassar

THOMAS ROBERT HAMILTON (1969)

*Chairman Biology Department;
Instructor in Biology*

B.S. Tusculum College; M.S.
University of Pennsylvania;
M.A.T. Brown

GEORGES NICOLAS KRIVOBOK
(AA 1969)

*Chairman, Russian Department;
Instructor in French and Russian*

B.A. Swarthmore; M.A.
Middlebury

CARROLL WESLEY BAILEY (1970)
*Dean of Abbot Cluster; Instructor in
English*

A.B., J.D. University of Pittsburgh

PETER JOSEPH BALEYKO (1970)

Assistant to the Comptroller
S.B. Boston College

FRANCIS EMANUEL BELLIZIA, JR.
(1970)

*Chairman, Department of Theatre and
Dance; Instructor in Theatre*

A.B. Dartmouth; A.M. Middlebury

PAUL KALKSTEIN (1970)

Instructor in English
A.B. Princeton; M.A.T. Yale

HENRY BOND WILMER, JR. (1970)

Instructor in French
B.A. Davidson; M.A. Middlebury

DOUGLAS EVERETT CRABTREE
(1971)

Instructor in Mathematics
A.B. Bowdoin; M.A. Harvard;
Ph.D. University of North
Carolina

ROBERT LEE CRAWFORD (1971)

*College Counselor; Instructor in
History and the Social Sciences*

B.A. Northwestern; S.T.B.
The General Theological
Seminary; M.A. University of
Pennsylvania

GLENN FRANK BASTIAN (1972)

Instructor in Biology and Theatre
A.B. University of Pittsburgh

GEORGE MACNAMARA DIX (1972)

Instructor in Modern Languages
A.B. Brown; A.M. Middlebury

BARBARA E. HAWKES (AA 1972)
Instructor in Biology

A.B. Tufts; M.S. Northeastern

HENRY LYNN HERBST (1972)

Instructor in French
A.B. Hamilton; A.M. University
of Pennsylvania

ALEXANDRA REWIS KUBLER-
MERRILL (AA 1972)

*Chairman Psychology Department;
Counselor and Instructor in
Psychology on Abbot Academy
Teaching Foundation*

B.A. Smith; M.A.T. Yale

GEORGE A. NEILSON, JR. (1972)

Business Manager
B.S., M.Ed. Boston University

STEPHEN B. WICKS (AA 1972)

Instructor in Art

LESLIE BALLARD (1973)

Instructor in Chemistry and Biology
B.A. Sarah Lawrence; M.A.T.
Harvard

YOLANDE BAYARD (1973)

Instructor in French
B.S., M.A. Central Connecticut
State College

ROBERT PETER PERRIN (1973)

Instructor in Mathematics and Physics
B.S., Ph.D., Massachusetts
Institute of Technology

EDWIN GUSTAVUS QUATTLEBAUM,
III (1973)

*Instructor in History and the Social
Sciences*

A.B. Harvard; M.A. Ph.D.
University of California

NANCY FAUST SIZER (1973)

*Instructor in History and the Social
Sciences*

B.A. Wellesley; M.A. Harvard

ELWIN SYKES (1973)

*Director of (MS)² Program; Instructor
in English on the John H. Porter, Jr.
Bicentennial Instructorship*
A.B., M.A. Harvard

PRISCILLA KEENE BELLIZIA (1974)

Graham House Study Counselor
A.B. Bates; M.A.T. Brown

CAROLYN B. BRECHER (1974)

*Instructor in Modern Dance; Assistant
in Audio-Visual*
A.B. Bard

PATRICIA HOPE EDMONDS (1974)

Foundations & Corporations Officer
A.B. Mount Holyoke; M.A.T.
Radcliffe

Faculty

- CHRISTOPHER JUDE GURRY (1974)
Instructor in History and the Social Sciences
A.B. Harvard; M.A. Tufts
- SALLY CHAMPLIN HERBST (1974)
Instructor in French
A.B. Mount Holyoke
- MARC DANA KOOLEN (1974)
Instructor in Biology
B.S. St. Lawrence; M.S. Purdue
- JEAN CRAWFORD McKEE (1974)
Admissions Coordinator
B.A. Middlebury
- ELAINE SPATZ-RABINOWITZ (1974)
Instructor in Painting
B.A. Antioch; M.F.A. Tufts
University and Museum School
- NATALIE GILLINGHAM SCHORR (1974)
Instructor in French
B.A. McGill; d.e.s., Aix-Marseille;
M.A. University of Pennsylvania
- WILLIAM E. THOMAS (1974)
Chairman Music Department;
Instructor in Music
B.A. Oberlin; M.F.A. Pennsylvania
State University
- BARBARA LEE WICKS (1974)
House Counselor
- DONALD H. BADE (1975)
Comptroller
B.B.A. University of Wisconsin
- HELEN M. ECCLES (1975)
Director of Public Information
A.B. Bryn Mawr
- HERBERT HARRY MORTON, III (1975)
Registrar; Instructor in Mathematics
A.B. Dartmouth
- SANDRA URIE THORPE (1975)
Associate Secretary of the Academy and
Executive Director of Annual Giving
A.B. Stanford
- RICHARD H. WILSON, JR. (1975)
Instructor in Music
B.A. Harvard; M.Mus. New
England Conservatory of Music
- VINCENT B.J. AVERY (1976)
Chairman, Department of Philosophy
and Religious Studies; Instructor in
Religion and Philosophy; Dean
Short Term Institutes
S.T.L., Ph.D., Academia
Alphonsiana, Rome
- ELAINE RANKIN BAILEY (1976)
Associate Cluster Dean
B.A. William and Mary
- SARAH ANNE DOOLITTLE (1976)
Instructor in Physical Education
B.S. Ed. Northeastern
- JANETTE ELIZABETH HANNAH (1976)
House Counselor
M.A. Edinburgh University
- SUZANNE EDDY KIP (1976)
House Counselor
- MICHAEL ALLEN LOPES (1976)
Instructor in English
B.A. University of California at
Berkeley; M.A. State University
of New York at Stony Brook
- HARRISON FAIRFIELD McCANN (1976)
President, School Year Abroad
B.A. Williams; M.A. Middlebury
- PHYLLIS WENDOVER POWELL (1976)
Dean of Studies; Instructor in History
and the Social Sciences
B.A. Wellesley; M.A. Harvard
- CAROL CAMERON RICHARDS (1976)
Dean, Rabbit Pond Cluster; House
Counselor
A.A. Bennett
- JONATHAN A. STABLEFORD (1976)
Dean of West Quadrangle South
Cluster; Instructor in English
B.A. Williams; M.A.T. Wesleyan
- REBECCA MILLER SYKES (1976)
House Counselor
A.B. Radcliffe
- EVERETT E. GENDLER (1977)
Jewish Chaplain; Instructor in Religion
and Philosophy
B.A. University of Chicago; M.H.L.
Jewish Theological Seminary
- LOUIS M. BERNIERI (1977)
Instructor in English
A.B. Harvard; M.A. Middlebury
- THOMAS SALKALD HODGSON (1977)
Instructor in Religion and Philosophy
B.A. Williams; M.A. Yale
- REBECCA D. McCANN (1977)
Instructor in Spanish
A.B. Lake Erie; M.A. Middlebury
- DAVID B. POTTLE (1977)
Instructor in Classics; Assistant
Director of Summer Session
B.A. Northwestern; Ph.D., Tufts
- RUTH QUATTLEBAUM (1977)
Instructor in Art
Archivist
A.B. Wheaton; M.A. Columbia
- JAMES L. SHELDON (1977)
Curator of Photography
A.B. Cornell
- DIANE L. SOUVAINE (1977)
Instructor in Mathematics
A.B. Radcliffe; M.A.L.S.
Dartmouth
- JANE WHEELER (1977)
Curator of the R.S. Peabody
Foundation for Archaeology;
Instructor in Archaeology
B.A. The American University;
Ph.D. University of Michigan
- CHARLES ALLEN WILLAND (1977)
Instructor in Biology
B.S. Brown; M.S. University of
South Carolina
- J. PHILIP ZAEDER (1977)
Protestant Chaplain; Instructor in
English
B.A., M.Div. Yale
- JEANNE E. BUSSIÈRE (1978)
Instructor in English
B.A. Dartmouth; M.A. University
of London, Queen Mary College
- DAVID M. GRAHAM (1978)
Instructor in Physical Education;
Assistant to Athletic Director
B.S. Miami University of Ohio
M.Ed. East Stroudsburg
- MARY M. GRAHAM (1978)
House Counselor
- SUSAN BROWNELL HODGSON (1978)
House Counselor
B.A. Wellesley; M.A. University of
Connecticut
- MARY J. MCCARTHY (1978)
Instructor in Art
A.A. Bay Path Junior College;
B.A. William Paterson College
- DIANA I. McNAB (1978)
Instructor in Physical Education
B.S. State University of New York
at Buffalo; M.Ed. Boston
University
- GERALDINA MATTIA (1978)
Instructor in Physical Education
B.S. East Stroudsburg State College

- RANDALL S. PEFFER (1978)
Instructor in English
B.A. Washington & Jefferson; M.A.
University of New Hampshire
(SYA Barcelona 1981-82)
- BRUCE SMITH (1978)
Instructor in English
B.A., M.A. Bucknell
- ALEXANDER L. THEROUX (1978)
*Roger F. Murray Instructor in English
and Writer in Residence*
B.A. St. Francis; M.A., Ph.D.
University of Virginia
- JEANNE AMSTER (1979)
*Instructor in History and the Social
Sciences*
A.B. Mt. Holyoke; M.A. Stanford
- CAROLE BRAVERMAN (1979)
Instructor in English
B.A. Brooklyn; M.A. Purdue
- ANDREW J. CLINE (1979)
Instructor in Mathematics
B.A. College of Wooster
- ALBERT COONS (1979)
Instructor in Mathematics
B.A. Johns Hopkins
- DONALD M. DUNBAR (1979)
College Counselor
A.B. Colby; M.Div. The Episcopal
Divinity School; M.A.L.S.
Wesleyan
- SARAH MacMILLAN GATES
(1979)
Assistant to the Headmaster
B.A. Bowdoin
- EDWARD B. GERMAIN (1979)
Instructor in English
B.A., M.A., Ph.D. University
of Michigan
- ANN H. HARPER (1979)
Instructor in English
B.A. University of Pennsylvania;
M.A. University of Chicago
- CARMEL RODRIGUEZ-WALTER
(1979)
Instructor in Spanish and History
B.A. California State University
M.A. University of California
- CYNTHIA ASHLEY
STABLEFORD (1979)
Associate Cluster Dean
A.B. Vassar
- MARY COMFORT STEVENS
(1979)
*Alumni Relations Officer; College
Counselor*
A.B. Mount Holyoke
- SYLVIA LOUISE THAYER (1979)
Dean of Flagstaff Cluster
B.A. Wellesley
- SHIRLEY A. VEENEMA (1979)
Instructor in Art
B.A. Bucknell; M.A. Glassboro
State College
- SHELLY M. WEISS (1979)
Instructor in English
B.A. Dickinson
- NANCY G. WILSON (1979)
*Associate Cluster Dean of West Quad-
rangle North Cluster*
B.S. Lesley
- DONALD THOMPSON BARRY (1980)
Instructor in Mathematics
B.A. Carleton; M.Div. Yale
- MIMI DENTON BRAVAR (1980)
Instructor in Music
B.S. Juilliard
M.M. Boston University
- PAMELA BROWN (1980)
Study Counselor
B.A. Penn State
M.Ed. Boston College
L.D. Certificate Curry College
- STEPHEN DOUGLAS CARTER (1980)
*Dean of Pine Knoll Cluster; Instructor
in Mathematics*
Sc. B. Brown; M.A.L.S. Wesleyan
- ADELA B. CARTER (1980)
Associate Cluster Dean
A.B. Brown; M.L.S. University of
Rhode Island
- JENNIFER JORAN CLINE (1980)
House Counselor
B.A. College of Wooster
- BRUCE M. CRAWFORD (1980)
Director of Physical Plant
B.S. Lowell Tech
M.M.S. Lowell Tech
- KATHLEEN MARY DALTON (1980)
*Instructor in History and the Social
Sciences*
B.A. Mills; M.A., Ph.D. Johns
Hopkins
- LAURA PARRISH DOBSON (1980)
Instructor in English
B.A. Yale; M.A. Brandeis
- LYDIA BUTLER GOETZE (1980)
Instructor in Biology
A.B. Radcliffe; M.A.T. Johns
Hopkins
- RICHARD DOWNING HORN (1980)
House Counselor
Research Associate
A.B. Harvard; M.A.L.S.
Dartmouth
- SUZY C. JOSEPH (1980)
Instructor in French
Licence Anglais, La Sorbonne
M.A. Indiana University
- BETH ANN LINDER (1980)
Instructor in German
B.A., M.A. Stanford
- JONATHAN LOUIS MARLOWE (1980)
*Instructor in Psychology and
Counselor*
B.A. University of California-
Santa Cruz
M.S., Ph.D. University of
Wisconsin-Milwaukee
- ANN MARIE PARKS (1980)
Director of Central Publications Office
BFA, Rhode Island School of
Design
- J. LAURENCE POWELL (1980)
Consultant to the Science Division
S.B., Massachusetts Institute of
Technology
- EDWARD JOSEPH RYAN, III (1980)
*Instructor in Physical Education &
Athletic Trainer*
B.S. Northeastern
- THOMAS GUTHRIE SPEERS, 3rd
(1980)
Admissions Officer
B.A. Connecticut College
- JAMES WALTER STEPHENS (1980)
Instructor in English
A.B. Princeton; M.A., M.Phil.,
Columbia
- CATHERINE ANN STEINER-ADAIR
(1980)
*Counselor at Graham House and
Instructor in Psychology*
B.A. Bowdoin, Ed.M. Harvard
- VICTOR SVEC (1980)
Instructor in Russian
B.A. University of Washington
- JOSEPH PETER SWAIN (1980)
Instructor in Music
A.B. Dartmouth; A.M. Harvard

Faculty

PETER DAVIS WASHBURN (1980)
Instructor in Mathematics; Coach of Crew
B.A. Syracuse

ELIZABETH EBBOTT WASHBURN (1980)
House Counselor; Coach
B.A. Dartmouth

GREGORY JOSEPH WILKIN (1980)
Instructor in English
B.A. Yale; M.A. University of Toronto

J. DEREK WILLIAMS (1980)
Instructor in History and the Social Sciences
B.A. Wesleyan; M.A. University of North Carolina

CLAIRE D. WILSON (1980)
School Physician
A.B. Radcliffe
M.D. Harvard Medical School

SETH B. BARDO (1981)
Instructor in English
B.A. Yale; M.A.T. Harvard

SARAH ELIZABETH BARBO (1981)
House Counselor
B.A. University of Massachusetts

KATHERINE ANN BERGERON (1981)
Instructor in Music
B.A. Wesleyan

STEPHEN MALCOLM BOWERS (1981)
Instructor in Astronomy and Physics; Director of Social Functions
B.A. Williams

NANCY B. BROTHER (1981)
Study Counselor
B.S. University of Nebraska
Ed.M. University of Lowell

REBECCA CARR (1981)
Admissions Officer
A.B. Mount Holyoke

HANNAH T. CLARK (1981)
Instructor in Music
B.A. Williams

SUSAN G. COMSTOCK (1981)
Assistant Business Manager
B.A. Wellesley;
M.C.R.P., Harvard

PAULA F. DREWNIANY (1981)
Instructor in Mathematics
A.B. Smith

GEORGE H.J. FACER (1981)
Exchange Instructor in Chemistry
B.Sc., M.A. University of Oxford

DEBRA A. FAULKNER (1981)
House Counselor
A.A. Manatee Junior College
B.B.A. Stetson

JOHN ALLEN FAULKNER (1981)
Instructor in Art
A.A. Manatee Junior College
B.A. Stetson

RICHARD K. GROSS, S.J. (1981)
Roman Catholic Priest; Instructor in History and the Social Sciences and Religion and Philosophy
A.B., Boston College; M.A. London School of Economics;
M.Div. Weston School of Theology

TIMOTHY DUER HILLMAN (1981)
Instructor in Theatre
B.A. Bates

ELIZABETH KRUMPE (1981)
House Counselor; Hostess at Cooley House
B.A. Radcliffe; M.A. Harvard

SOPHIE MAILLARD (1981)
Instructor in French
Licence de Lettres Modernes, Université PARIS X NANTERRE;
Certificat de Methodes audio visuelles, La Sorbonne Paris III

BRITTA S. MCNEMAR (1981)
Assistant Director of College Counseling
A.B. Connecticut College; M.S. ed, University of Pennsylvania

SUSAN MONSKY (1981)
Instructor in English
B.A. Brandeis; M.A. Boston Univ.

KYRA L. MONTAGU (1981)
Director of the Campaign for the Addison Gallery
A.B. Radcliffe

ANTHONY OLCOTT (1981)
Instructor in English
B.A., M.A., Ph.D., Stanford

THOMAS POOL (1981)
Director of Food Services

RONALD EDWARD RECTOR (1981)
Instructor in English
M.A. Johns Hopkins

LYNNE C. ROBBINS (1981)
Director of the Oliver Wendell Holmes Library
B.A., University of Pennsylvania
M.S. Simmons

E. ANTHONY ROTUNDO (1981)
Instructor in History and the Social Sciences
B.A. Wesleyan; M.A.T. Harvard

PETER M. SELLARS Fall term only (1981)
Visiting Instructor in English
A.B. Harvard

JULIAN SLAYTON (1981)
Religion Intern
B.A. Smith

CLAUDIA THOMAS (1981)
Instructor in English
B.A. College of Notre Dame of Maryland; M.A. University of Virginia

DAVID A. THOMAS (1981 Winter & Spring)
Exchange teacher in History and the Social Sciences
B.A., B.Ec., M.A. Sydney University

JENNIFER C. WHEAT (1981)
Instructor in Classics
B.A. Wellesley; M.A. University of North Carolina

ELKA B. WHITNEY (1981)
Instructor in Mathematics
B.A. Old Dominion University;
M.A. University of Illinois-Urbana-Champaign

TEACHING FELLOWS 1981-1982

HEATHER C. BRYANT
Teaching Fellow in English
A.B. Harvard

DANIEL J. CHISHOLM
Teaching Fellow in French
A.B. Holy Cross

LAURA A. CIPRIANO
Teaching Fellow in Music
B.A., M.A. Boston University

SONIA M. GONZALEZ
Teaching Fellow in Administration
B.A. Colgate

LUCY G. HANNA
Teaching Fellow in Athletics
A.B. Dartmouth

HELEN HEMMINGER
Teaching Fellow in Mathematics
B.A. Dartmouth

C. ANDREW MCCARTHY
Teaching Fellow in English
B.A. Brown

KEVIN P. McLAUGHLIN
Teaching Fellow in Spanish
A.B. Dartmouth

JOHN A. MARRELLA
*Teaching Fellow in History and the
Social Sciences*
B.A. Amherst

ITALO SPIRIDIGLIOZZI
Teaching Fellow in Art
B.S.A.D., Massachusetts Institute of
Technology

BART M. SREBNICK
Teaching Fellow in English
B.A. Northwestern

FACULTY ASSOCIATES

YOLANDA R. BALLOU
Library Cataloguer
B.A., University of Massachusetts;
M.L.S. Simmons

SUMIDA COBB
Associate to the Dean of Residence

MARGARET F. COUCH
Assistant Cataloguer
A.B. Wheaton

PAULA SCALERA CROSS
Library Collection Developer
B.A. Salem State; M.L.S. University
of Rhode Island

MARJORIE CROSSLEY, R.N.
Nurse, Isham Infirmary
Lawrence General Hospital School
of Nursing

EILEEN HALL
Administrator, Isham Infirmary

GLORIA A. HOLBROOK, R.N.
Nurse, Isham Infirmary
Lawrence General Hospital School
of Nursing

MARIE-LUISE KRIVOBOK
Hostess at Cooley House
R.N. Sankt Hedwig Klinik,
Mannheim, W. Germany

JOANNE MULDOON, R.N.
Nurse, Isham Infirmary
St. John's Hospital School of Nursing

JEANNETTE GRANGER MUNROE
Hostess at the Underwood Room

VIRGINIA M. MURPHY, R.N.
Nurse, Isham Infirmary
St. John's Hospital School of Nursing

ANN P. ROYCE
Assistant Director, Audio-Visual Center

CAROLYN D. SKELTON
School Organist
B.A. Hastings College; M.M., New
England Conservatory of Music

ALBERTA B. STAMMERS
Assistant Director, Language Laboratory
Licenza Liceale Classica from Licero
Classico

JOAN VERRETTE, R.N.
Nurse, Isham Infirmary
St. John's Hospital School of Nursing

JOAN C. WALSH, R.D.H.
Dental Hygienist
Forsyth Dental School

SALLY SLADE WARNER
*Assistant in Music Department and
Academy Carillonneur*
Ch.M., A.A.G.O., American Guild
of Organists

LOUIS ZUPPARDI
Radiology Technologist
R.T., R.M.T. Lawrence General
Hospital

LOUISE ZURAWEL, R.N.
Nurse, Isham Infirmary
St. Luke's Hospital, New Bedford

ABBOT ACADEMY EMERITI

MARY CARPENTER DAKE
*Instructor in Physical Education,
Emerita*
Green Valley, Ariz. 1925-1945

M. DOROTHY BAKER
Instructor in English, Emerita
Bath, England 1945-1950

DOROTHEA WILKINSON
Instructor in English, Emerita
Fredericton, N.B., Canada 1939-1953

MARGUERITE CAPEN HEARSEY
Headmistress, Emerita
Wellesley, Mass. 1936-1955

ANNA ROTH
Instructor in History, Emerita
Franklin, Mass. 1942-1956

MARJORIE F. STEVENS
Instructor in Mathematics, Emerita
Andover, Mass. 1945-1961

ALICE CURTISS SWEENEY
Instructor in English, Emerita
Andover, Mass. 1935-1961

HOPE COOLIDGE
Director of Food & Housing, Emerita
Concord, Mass. 1938-1962

EDITH TEMPLE JONES
Instructor in French, Emerita
Fairhaven, VT 1954-1967

GERMAINE AROSA
Instructor in French, Emerita
Essex, Mass. 1945-1969

PHILLIPS ACADEMY EMERITI

MILES STURDIVANT MALONE, Ph.D.
Instructor in History, Emeritus
Daytona Beach, Fla. 1937-1962

EMORY SHELBY BASFORD, A.B.
Instructor in English, Emeritus
Gaithersburg, Md. 1929-1964

FLOYD THURSTON HUMPHRIES, A.B.
Instructor in French, Emeritus
Naples, Fla. 1937-1964

JOHN SEDGWICK BARSS, A.M.
Instructor in Physics, Emeritus
Andover, Mass. 1923-1965

ALFRED GRAHAM BALDWIN, A.B.,
B.D., D.D.
*Instructor in Religion and School
Minister, Emeritus*
Andover, Mass. 1930-1968

CORNELIUS GORDON SCHUYLER
BANTA, S.B.
Instructor in Mathematics, Emeritus
Winter Park, Fla. 1944-1968

JOHN BROMHAM HAWES, Ed.M.
*Instructor in English and Assistant
Dean, Emeritus*
Weston, Vt. 1933-36, 1939-70

BARTLETT HARDING HAYES, JR., A.B.
*Director of the Addison Gallery of
American Art and Instructor in Art,
Emeritus*
Andover, Mass. 1933-1969

FREDERICK JOHNSON, S.B., Sc.D.
*Director of the Robert S. Peabody
Foundation and Instructor in
Anthropology, Emeritus*
Andover, Mass. 1936-1969

LEONARD FRANK JAMES, A.M.
Instructor in History, Emeritus
Medomak, Me. 1932-1970

ALSTON HURD CHASE, Ph.D.
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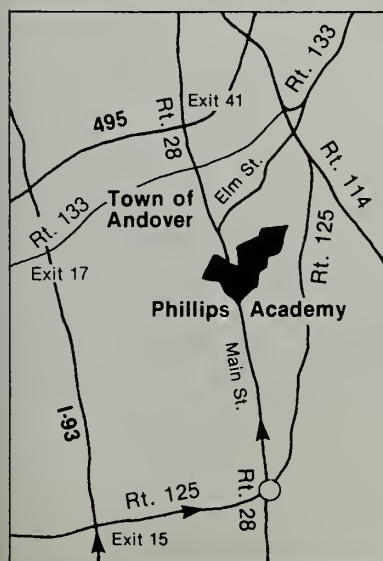
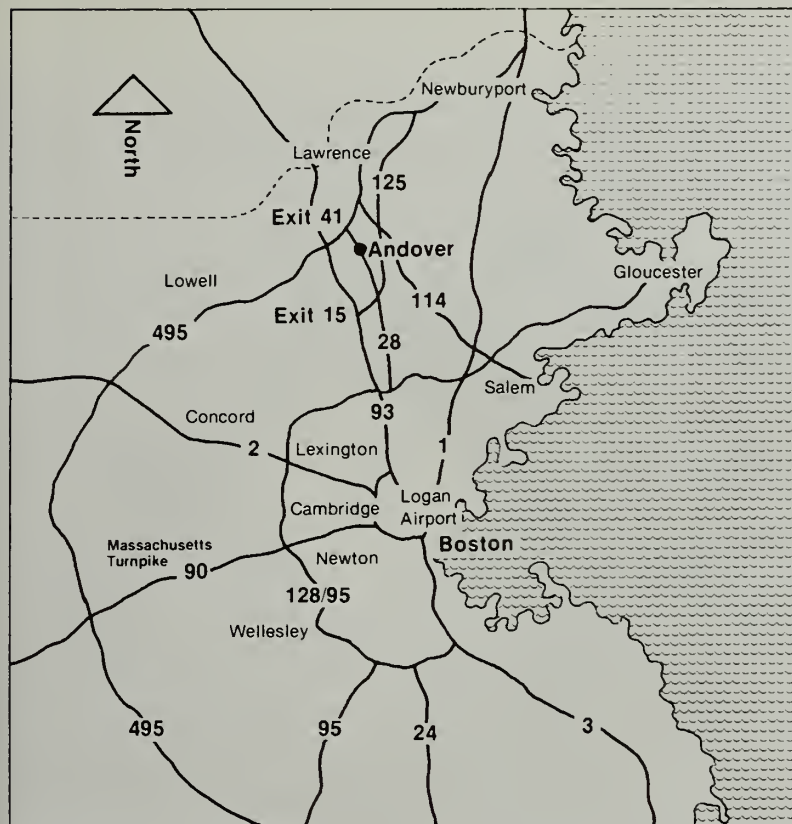
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Inns and Motels in the Area

Andover Inn
Chapel Avenue, Andover
617/475-5903

Holiday Inn
Winthrop Avenue
Lawrence
617/686-9411

Koala Inn
River Road
Andover
617/685-6200

TRAVELING TO ANDOVER

If traveling by car from Boston, take Route 93 north for about 19 miles. Take Exit 15, then turn right (east) on Route 125 for 2 miles. Turn right onto Route 28 and go north about 4 miles to the Andover campus. Turn right at the Bell Tower on the corner of Route 28 and Salem Street. The Admissions Office is the first building on the right.

If driving from Logan Airport, follow the signs to Boston via the Sumner Tunnel and follow Route 93 north signs.

From Route 495 north or south take the exit marked Andover and proceed south on Route 28 through the town of Andover. The Phillips Academy campus is approximately one mile south of the Andover center. Turn left on Salem Street, by the Bell Tower.

The Trombly Motor Coach Service runs buses to Andover from the Trailways Bus Terminal, 555 Atlantic Avenue, Boston. Visitors should call the bus terminal in Boston 617/482-6620 for up-to-date information.

Sheraton Rolling Green Motor Inn
Lowell Street, Andover
617/475-5400

Merrimack Valley Motor Inn
Route 125, Chickering Road
North Andover
617/688-1851

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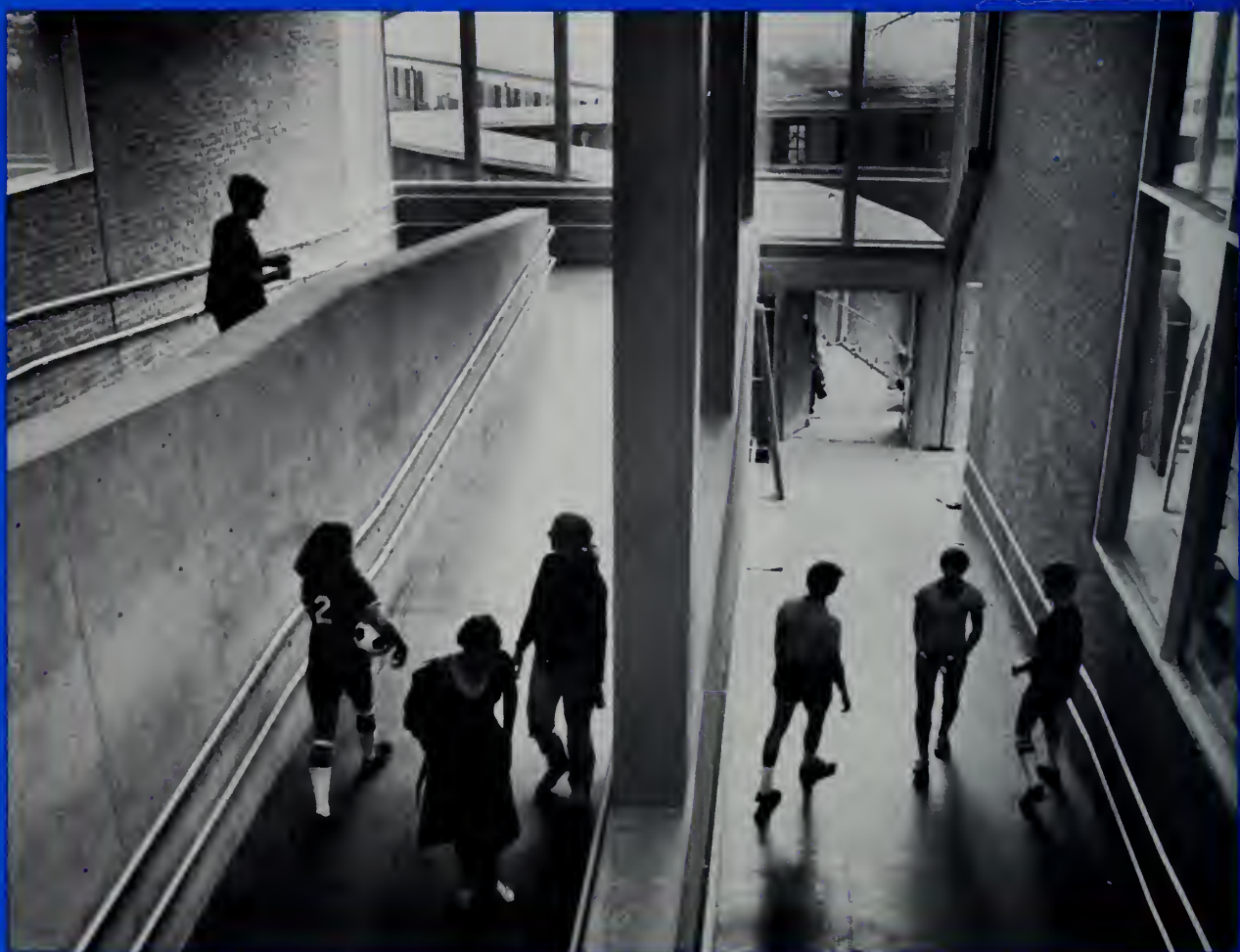
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1983-84

Andover

Course of Study

Phillips Academy

Course of Study

1983-1984

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Course of Study

The curriculum of Phillips Academy comprises a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Placement in the year-level of a subject may be independent of a student's grade in school; through advanced placement at entrance or accelerated courses, many students fulfill requirements ahead of the normal year, thereby gaining increased opportunity for college-level or other elective courses. Instruction is given in all subjects usually required for entrance to higher institutions.

Classroom groups are small enough to permit individual attention, and students are placed in sections fitted to their skill level. Accelerated sequences and advanced courses offer particularly able and well-prepared students opportunity to progress at a rate commensurate with their ability and ambition. Most departments offer courses beyond the level of preparation for college.

For full membership in a given class, students should have credit for the work of the lower classes or its equivalent. However, students are rated as members of a given class if their deficiencies for full membership in it do not exceed a certain number of trimester courses.

Every student is assigned to an Academic Advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements, and the student's particular interests. Students should familiarize themselves with the Academy's basic curriculum—both its requirements and its flexibility.

Members of the Upper Middle and Senior classes should become aware of the entrance requirements of the colleges they may wish to enter.

The Trimester Plan

The academic year is separated into three trimesters. There are two types of weekly class schedules: one during which classes meet only Monday through Friday, and the other during which classes also meet on Saturday morning. There are roughly equal numbers of these five and six-day weeks in

each trimester. Within a given week classes are scheduled to meet according to varying patterns: some for four fifty-minute periods; others for five such periods; and a few seminar and studio courses for two two-hour blocks. Many departments offer year-long courses as well as those which are term-contained (completed in one trimester). The diploma requirements are stated in terms of full-year courses or trimester courses, depending on the academic area involved.

Special courses in Foreign Languages

Special courses covering the work of two years in one are open to qualified Seniors in Chinese, German, Greek, Italian, Latin, Russian, and Spanish. These 10-20 courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and therefore are not recommended for students of limited language ability. Entering Seniors with no previous foreign language experience must pass a 10-20 course as a diploma requirement.

Accelerated Sequences and Advanced Placement

The Andover curriculum offers accelerated sequences in most departments. It provides special programs in Latin, Greek, and the modern foreign languages, designed to cover four years' work in three—or five years' work in four. The programs are open, on invitation of the departments, to especially able and ambitious students.

A large number of Phillips Academy students take College Board Advanced Placement Tests in May to establish advanced placement in college courses or credit toward the college degree.

Advanced Placement Examinations are offered in: American History, Art History, Chemistry, English, European History, French, German, Latin, Mathematics, Music, Physics, Spanish, and Studio Art (portfolio).

Independent Projects

With the approval of the Dean of Studies and in accordance with requirements established by the Faculty, a student may substitute independent work for some portion of the normal course load. An independent project may replace a given

course for up to three trimesters of a student's stay at the Academy, or may replace all courses during a given trimester. In either case, the work is done under the supervision of a member of the Faculty.

Off-Campus Programs and Projects

The school offers several off-campus residential programs. The *Washington Intern Program*, in which Andover joins with Exeter, allows a group of Upper Middlers and Seniors to spend the Spring Term living together in Washington and working in the offices of U. S. Senators and Congressmen. (See *History* 300.)

Students enrolled in Spanish at the third level or higher may elect a residential Winter Term of study in Mexico. (See *Spanish* 35.)

Selected students of French may spend the Winter term in Antibes, France, attending local schools and residing with a family in the city.

In addition to school-sponsored programs, the trimester plan provides an opportunity for individual Seniors to arrange off-campus projects related to their special interests. Some Seniors have worked as interns with officials in local government and members of the Massachusetts legislature. Others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative in the investigation of opportunities and careful planning of a course of study that will meet diploma requirements and also free a block of time during the appropriate term.

School Year Abroad

Students may elect to spend their Upper Middle or Senior Year studying in France or Spain with *School Year Abroad*, originated as an off-campus program by Andover, later joined as a sponsor by Exeter and St. Paul's. Students live with host families, while pursuing a course of study under the supervision of teachers from the three original sponsoring schools. Although *School Year Abroad* is now an independent program, it provides students with courses that earn full academic credit at Andover and with the experience of immersion in a foreign culture. Students wishing to participate should

consult their Academic Advisor and the *School Year Abroad* office (located in Samuel Phillips Hall on the Phillips Academy campus) for guidance in the selection of courses for the years prior to and following the year abroad.

Summer Session

The *Andover Summer Session* is a six-week academic enrichment program for boys and girls of high school age. Students who wish to receive Phillips Academy credit for courses taken at the *Andover Summer Session* must receive prior approval from the chairman of the department involved.

Planning a Program of Studies at Andover

The following is designed to help Andover students and their parents to understand the curriculum, and to show the major decisions, and their consequences, which face students at each stage of the four-year academic program.

Workload

All new students are advised to carry only a normal program of five courses each term in the Junior, Lower Middle, and Upper Middle years. The requirement for the Senior year is four courses or the equivalent of the fourth course—that is, independent work equivalent to a course. Upper Middlers and Seniors may elect to adjust their workload by carrying four courses or five courses in any trimester during their last two years as long as the total for the two years comes to twenty-seven trimester units.

Academic Advising

Each student has an Academic Advisor; this member of the Faculty is responsible for counseling the student in the planning of his or her course of study at Andover. The Advisor meets with the student during the Orientation period prior to the opening of school in September to review the course selections which the student has made during the previous Summer or Spring. The Advisor must approve the selections for the Fall Trimester at this time, and those for the Winter and Spring Trimesters, respectively, during conferences held later in the year.

Within the diploma requirements, programs of study are determined by the student's long-range needs and aspirations—insofar as these can be identified. These needs may include college and career plans, strengths and weaknesses as revealed by previous performance and aptitude tests, and character and personal development.

In addition to the Academic Advisor, the House Counselor or Day Student Counselor must also approve the student's course selection for each trimester. From time to time during the academic year, the Counselor will report to parents concerning the student's growth and progress. Late each spring students in the three lower classes and their respective Academic Advisors will prepare a selection of courses for the coming year; a copy of this selection will be mailed to parents in June.

Although the student is ultimately responsible for the selection of his courses, the Academic Advisor will welcome any information and suggestions that parents may wish to offer.

Arena Day

Students register for their courses and selections in an arena setting before each term. Following meetings with their Academic Advisors, students make certain that the desired courses have sections scheduled that permit a conflict-free, workable daily program. Entrance into the arena is by classes and in numerical order according to a randomly chosen, pre-assigned number. Students are advised to have alternate selections in mind in the event that some of the desired sections are full; enrollment is on a first-come, first-served basis.

Diploma Requirements

The basic diploma requirement is the satisfactory

completion of a four-year secondary school program, of which at least three trimesters must be at Andover; the student must be in good standing (not on Probation or under Suspension) at the time of graduation. A student who has been dismissed is ineligible for a diploma unless readmitted.

A student's required program normally includes nine trimester units of a foreign language, eight of mathematics, three trimester units of United States History, plus an additional trimester course in history taken at the Upper Middle or Senior level, a full-year course in a laboratory science, one trimester of art (usually *Visual Studies-Art 10*), one trimester of music (usually *The Nature of Music-Music 20*), and six of English, these to include a year-long course of competence in writing and reading and a three-trimester sequence of general literature. In order to be eligible for a diploma all students must satisfy the swim requirement of the Department of Athletics. Certain diploma requirements vary with the class level at which the student enters Phillips Academy. Entering Juniors and Lower Middlers must take a trimester course in physical education in addition to required athletics, and, beginning in September 1983, must take, prior to graduation, at least one trimester course offered by the Department of Philosophy and Religious Studies. Entering Upper Middlers need take only one trimester of either art or music at the Academy. Entering Seniors are not required to take either art or music. Some modifications of the language requirement are made for entering Upper Middlers and Seniors. Entering Seniors with no previous foreign language experience must pass a 10-20 course in a foreign language. A Senior must *pass* a minimum of twelve graded trimester courses during the Senior year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Independent Projects are counted as graded courses.

Credits (trimester units) required for diploma are:

For Entering Juniors 54

For Entering Lovers 51

For Entering Uppers 48

For Entering Seniors 48

Newly Admitted Students

Students entering for their first year are sent place-

ment material, including some forms for present teachers to complete and a self-administered diagnostic test in elementary algebra. These items are used by the Academy to aid in proper placement or recommendation of course levels. New students are also asked to complete to the best of their ability a Course Selection form, indicating the courses that they wish to take during the coming year. Although the placement material may alter somewhat a student's preliminary selections, it is helpful, for planning purposes, to know the levels that each student thinks he or she is ready to enter.

The Main Choices at Each Stage of a Four-Year Program

While a student's program of studies is adapted each year to his changing situation, the *future consequences* of each course should be noted, for certain choices in one year open the way to later options and may close the door to others.

JUNIOR YEAR

Each trimester a Junior must take five courses, only one of which may be a Pass/Fail course. Students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring.

In selecting courses, students are reminded to check the diploma requirements. A Junior's program should resemble the following outline:

1. Math—begin sequence (usually *Mathematics 10* or *11*);
2. Foreign Language—begin sequence (usually a year-long course at the 10-level);
3. English—*English 10* (elective);
4. Elective [Art, Social Science, History, another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]
5. Elective

LOWER MIDDLE YEAR

Each trimester a Lower Middler must take five courses, only one of which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. A few stu-

dents take the CEEB Achievement Tests during the Lower Middle year. In selecting courses, students are reminded to check the diploma requirements. A Lower's program should resemble the following outline:

New Students

1. Math—(usually *Mathematics 19* or *Mathematics 20*);
2. Foreign Language—enter the sequence by placement of the department;
3. English—begin sequence (*Competence*);
4. Elective [Art, Classics, History, another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]
5. Elective

Returning Students

1. Math—continue the sequence (usually *Mathematics 20* (T2), 32);
2. Foreign Language—continue the sequence;
3. English—begin sequence (*Competence*);
4. Elective [Art, Classics, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Theatre, Dance.]
5. Elective

N.B.

Students planning to be off-campus for a term (e.g., *Term in Mexico*, *Washington Intern Program*, etc.) should make sure they have no year-long courses during that year. Students wishing to participate in the *School Year Abroad Program* during their Upper Middle year should discuss these plans with their Academic Advisor and seek guidance for the selection of courses for the Lower Middle Year.

UPPER MIDDLE YEAR

During the Upper Middle Year and the Senior Year, a student must accumulate a total of 27 units in blocks of four or five courses per trimester. A Pass/Fail course may be elected as a fifth course only.

New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many students take the CEEB Preliminary Scholastic Aptitude Tests in the Fall; all take the CEEB Scholastic Apti-

tude Tests in the Winter; and many take the CEEB Achievement Tests in the Spring of their Upper Middle year. Some also take the CEEB Advanced Placement Tests in the Spring of their Upper Middle Year. As a matter of general policy Academic Advisors encourage "depth" in the selection of courses for the Upper Middle Year. Most students satisfy their United States History requirement during their Upper Year. In selecting courses students are reminded to check the diploma requirements. An Upper's program should resemble the following outline:

New Students

1. Math—(usually *Mathematics 30, 31, or 35*);
2. Foreign Language—enter the sequence by placement of the department;
3. English—begin sequence (*Competence*);
4. Elective [Archaeology, Art, Classics, another English, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]
5. Elective [Archaeology, Art, Classics, another English, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

Returning Students

1. Math—continue the sequence (usually *Mathematics 35 (T2)*);
2. Foreign Language—continue the sequence;
3. English—continue the sequence (usually *Lit B (T2), Lit C*);
4. History—usually *History 300 (T2), 301 (The United States)*;
5. Elective [Archaeology, Art, Classics, another English, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

N.B.

Students wishing to take an *Off-Campus Independent Project* for a trimester of their Senior Year must have no year-long courses during their Senior Year.

SENIOR YEAR

During the Upper Middle Year and the Senior Year, a student must accumulate a total of 27 trimester units in blocks of four or five courses per trimester.

A Pass/Fail course may be elected only as a fifth course; however, an Independent Project, though marked on a Pass/Fail basis, is counted as a graded course.

A Senior must *pass* a minimum of twelve graded trimester courses during the Senior Year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Many Seniors retake the CEEB Scholastic Aptitude Tests in December and the CEEB Achievement Tests in January, and take the CEEB Advanced Placement Tests in May. In selecting courses students are reminded to check the diploma requirements. A Senior's program should resemble the following outline:

New Students

1. Math—enter the sequence by placement of the department; if the requirement is not yet satisfied enter *Mathematics 40*;
2. Foreign Language—enter the sequence by placement of the department if the requirement is not satisfied;
3. English—usually *English 300-12*;
4. Elective [Archaeology, Art, Classics, another English, History, another Math, a 10-20 Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]
5. Elective [Archaeology, Art, Classics, another English, History, another Math, a 10-20 Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

Returning Students

Usually most diploma requirements are satisfied. Careful selection of electives for continued depth in the student's chosen areas is encouraged.

Transferring and Dropping Courses

To transfer or drop a course, a student must obtain an official transfer slip from his or her Academic Advisor. This slip is then taken *as soon as possible* to the Scheduling Officer in George Washington Hall. Transfers into term-contained courses must take place during the first six calendar class days of the term. No course may be dropped after the end of the fourth week of classes of any term. Student wishing to drop year-long or T2 courses prior to the normal end of the course may do so only by gaining the approval of a group of five: the Department Chairman, the Dean of Studies, the student's House Counselor, Academic Advisor, and Instruc

tor. Credit is granted at the discretion of the Department Chairman and only if the student is passing the course at the time it is dropped and only for that portion completed. Year-long and T2 courses are considered as long-term commitments.

Attendance

Students are expected to attend all academic classes.

Instructors, if approached in advance, are permitted (but not required) to excuse students from a class meeting if the absence from that meeting will not add to weekend time. Only Cluster Deans may give permission to extend weekend time, and they may do so without consulting Instructors.

Failed Courses

In most cases, continuing students may attempt to receive credit for a failed course by taking a make-up examination. Spring Term Senior Failures may be made up only following Commencement.

College Entrance Examination Board Test Dates

Tests will be held on campus in 1983-84 as follows:

October 22	PSAT/NMSQT (<i>Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test</i>)
November 5	SAT/ACH
December 3	SAT/ACH
January 28	SAT/ACH
May 5	SAT/ACH
June 2	SAT/ACH
May 14-28	AP (<i>Advanced Placement Examinations</i>)

Key to Course Designation

A course number ending in "0" denotes a year long course (Example: *Math 10-0*). A number ending "123" indicates that the course is term-contained, but sequential, and may be taken for one, two, or three terms (Example: *Art 26-123*). A number ending in a single digit "1," "2," or "3" indicates a course, that is term-contained, but one that may be taken only once. (Example: *Music 20-2*). The designations 1, 2, and 3 indicate the trimester during

which the course is offered: 1 = Fall; 2 = Winter; 3 = Spring. Some courses require a two-term commitment; they are indicated by a "(T2)" following the course name (Example: *Physics 52-12 Advanced Physics (T2)*). Check carefully each course description for any other limitations: Prerequisites, permission of instructor or department chairman required, etc.

Immediately below each course number is a 4-digit number in parentheses. This identification number (often referred to as the "computer number") is used for data processing files and is required when a student registers for courses. The final digit of the computer number has roughly the same meaning as the last digit of the course number: number:

Final Digit:	Indicates:
0	Year-long course
1	Course offered in Fall Trimester
2	Course offered in Winter Trimester
3	Course offered in Spring Trimester
4	T2 course offered in Fall and Winter
5	T2 course offered in Winter and Spring

Course Descriptions

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers a term-contained course as an elective.

25—3 Archaeology (Not offered 1983-84.)

Four prepared classes. Open to Upper Middlers and Seniors. Limit 15 students. The course explores the methods archaeologists use to reconstruct pre-historic societies and to test general statements concerning how and why these societies came to be the way they were. In doing this, several major transformations in human society are considered, beginning with the society of the earliest men, and ending with the first civilizations. Lecture and class discussions are supplemented by visual aids and work with archaeological specimens. A brief excavation may be conducted locally.

Art

The diploma requirement in Art is as follows: entering Juniors and Lowers must take a trimester course in a Studio Art; an entering Upper must take a trimester course in a Studio Art or Music at the Academy; neither a Pass/Fail course nor an Art History Course is accepted as fulfilling the requirement. The basic course, Visual Studies, covers a broad range of material, is open to students of all abilities and experience, and is a prerequisite to almost all elective courses in Art. Exemption from this prerequisite is granted only on the basis of a portfolio of work judged satisfactory by the Chairman of the Department in collaboration with the teacher of the course which the student desires to enter. An acceptable portfolio should contain examples of two-dimensional work, three-dimensional work (slides or photographs are acceptable), and photography.

The College Entrance Examination Board offers students the opportunity to gain Advanced Placement in Studio Art in many colleges and Art Schools, thus enabling a student to by-pass basic design courses. Students must submit a portfolio of slides and original work to Princeton in May. Students interested in Advanced Placement should enroll in *Art 315-1* and two subsequent terms in Art.

Students wishing to apply for an independent project in photography will not be eligible until they have taken *Art 12*, *Art 26*, and two terms of *Art 306*.

With the exception of *Art 40* and *41*, no Art course, if failed, can be made up by examination.

Students should expect to help pay for art materials.

Cameras are available for loan to scholarship students taking photography.

INTRODUCTORY STUDIO COURSES

10—1 Visual Studies

(0101) Five prepared class periods. Not recommended for Juniors. In its emphasis on visual observation, interpretation, and organization, the basic course is designed to provide an understanding of how visual information is made and transmitted. Along with discussion of design problems, the student receives experience in photography, drawing, two-dimensional design, and three-dimensional construction. Previous experience in art is not required.

11—12 Visual Studies for Juniors (T2) (a two-term commitment)

(0115) Four prepared periods. Strongly recommended for Juniors. This course introduces students to the language of vision through drawing, photography, color structure, and two and three dimensional design. Studio projects are coordinated with seminars in the Addison Gallery where students see and handle original works of art that instruct and clarify their own art making activity. The course will fulfill the diploma requirement in art and will serve as the equivalent of *Art 10* as a prerequisite for other Art courses.

12—1 Introductory Photography

(0121) **Prerequisite:** *Visual Studies*. An introduction to basic out-of-doors photography, the course covers fundamentals of exposure, developing and printmaking. A camera (35 mm. or 2 1/4) with manually controlled speed, aperture and focus is required; a light

meter is not necessary. (Scholarship students may borrow cameras from the school.) Emphasis is on both dark-room technique and aesthetic quality. This course may be bypassed by students with previous experience through the presentation of a portfolio.

14—1 Introductory Ceramics

(0141) Four classes per week plus an evening studio. Limit of ten students. Basic techniques

(0142) of hand-building, wheel-throwing, and glazing. Emphasis on the sculptural as well as

(0143) the functional possibilities of clay. At least one raku firing each term, or a similar special

project. No prerequisites, and does not fulfill the diploma requirement.

INTERMEDIATE STUDIO COURSES

Unless otherwise noted, the intermediate courses consist of four prepared classes each week. *Visual Studies (Art 10 or Art 11)* is a **prerequisite** for all intermediate courses. Any of these courses may be taken more than once to increase proficiency, as the courses are designed to deal with individual needs.

20—1 Drawing and Two-Dimensional Design

(0201) **Prerequisite:** *Visual Studies (Art 10)*. A course designed to develop drawing and two-dimensional composition skills. Drawing includes: life drawing, still life, and mono-printing. Two-dimensional design will deal with the organization of representational images, color, painting and collage. Continuation in *Drawing (Art 20-23)* or *Two Dimensional Design (Art 23-23)* in Winter or Spring is recommended. (Mr. Shertzer and Ms. Veenema)

20—23 Drawing

(0202) **Prerequisite:** *Visual Studies (Art 10)*. A course designed to develop observation and drawing skills in several media, based on the assumption that drawing is an end in itself as well as a skill basic to other media. Included: one life-drawing session each week. (Ms. Veenema and Mr. McMurray)

23—23 Two-Dimensional Design

(0232) **Prerequisite:** *Visual Studies (Art 10)*. The course deals with one's ability to manipulate those elements most associated with the picture plane: color, line, shape, texture, and composition of flat materials. Work includes: 1) color—free studies and collages dealing with the structural and expressive nature of color; 2) drawing—exercises using pencil, pen, and brush, figure and landscape drawing; and 3) figure-ground—expanding the structural and illusionary aspects of figure-ground as an end in itself and as a basis for graphic and advertising design. (Mr. Shertzer)

24—23 Three-Dimensional Design (T2) (a two-term commitment)

Prerequisite: *Visual Studies (Art 10)*. Industry, architecture and the crafts have required the development of professional design disciplines distinct from the fine arts. Joining aesthetic and scientific principles with knowledge of manufacturing and construction techniques, designing requires diverse skills and the ability to combine them. This course identifies some basic areas of concern—equilibrium, economy, function, scale—within an ecological frame of reference. In what ways have designers imitated nature? In what ways have they set themselves and their work against nature? How do economic, social, political and philosophical considerations influence design? Studio problems in design and construction will draw on the student's ability to learn and apply problem-solving techniques creatively; discussion and written exercises will ask the student to think about design as it defines the human enterprise. An introductory course in physics, chemistry or biology, taken previously or concurrently, will be helpful. This course provides a basis for further study in engineering, architecture or those arts and crafts which, like sculpture or furniture design, involve construction. (Mr. Lloyd)

26—123 Intermediate Photography

(0261) **Prerequisite:** *Art 12*. An extension of *Introductory Photography*, the course goes deeper into technical proficiency and aesthetic quality. Technical aspects include metering techniques, black and white filters, exposure and printing contrast controls, various developing styles and dark-room deviations. A camera and light meter are required. The student will be exposed to the works of various photographers so that he may gain a better sense of his own photographic style and identity.

27—13 Animation

(0271) **Prerequisite:** *Visual Studies (Art 10)*. An introduction to the art of illusion of motion through shooting still images frame by frame with 16mm sound motion picture film, with emphasis on the relationship to the sound track in structuring the finished product. Students with programming experience may work in computer animation. (Mr. McMurray)

HISTORY OF ART COURSES**40—1 History of Art: Painting and Sculpture**

(0401) Four prepared class periods. For Uppers and Seniors. Although a survey of Western Art from the cave painter to contemporary, the course exam-

ines four present-day directions by studying the historical styles as roots leading up to our time, with an emphasis on the 20th Century. (Mr. Bensley)

41—2 History of Art: Architecture

(0412) Four prepared class periods. For Uppers and Seniors. A survey of architecture and engineering from priestly civilizations to the present, the course emphasizes the architectural style as an expressive outgrowth of the culture that produced it. Combined with *Art 40-1*, this course should prepare students for the Advanced Placement Examination in Art History. (Mr. Bensley)

ADVANCED STUDIO COURSES

Visual Studies (Art 10 or 11) is a **prerequisite** for all advanced courses. These courses may be taken more than once.

300—123 Graphics and Photography

(0701) **Prerequisite:** *Visual Studies (Art 10)*. Applying photography to graphic arts, particularly through photo-silkscreen, photo-etching, and photo-lithography. Individual experimentation is emphasized in an attempt to carry the expressive force of photography beyond darkroom techniques. (Mr. McMurray)

302—123 Painting

(0721) **Prerequisite:** *Visual Studies (Art 10)*. An introduction introduction to the basic elements and techniques of painting in oils and acrylics. Specific problems are assigned to study the fundamentals of color, form, composition and space in painting, as well as to encourage the student's individual expression. Class critiques and discussions, slides, reproductions, films and occasional field trips are also part of the course. Previous experience is helpful but not necessary; students are encouraged to sign up for the full year if possible. (Ms. Spatz-Rabinowitz)

303—2 Filmmaking

(0732) **Prerequisite:** *Visual Studies (Art 10)*. This course combines viewing theatrical, documentary, and art films for discussion and criticism with the production of individual or group student films in super-8. Course work will include developing film ideas, script-writing, shooting, cutting, editing, and class critiques. (Mr. Sheldon)

304—123 Advanced Ceramics

(0741) **Prerequisite:** *Visual Studies (Art 10)*. This course aims to give a student knowledge of tal operation from design to execution. Hand-building, wheel-throwing, glazemaking (and some chemical analysis), responsibility for loading and firing electric, gas, raku, and salt kilns. Assigned reading and occasional field trips. Previous experience in clay is desirable. (Mrs. Bensley)

305—123 Printmaking

(0751) **Prerequisite:** *Visual Studies (Art 10)*. This course aims to give a student knowledge of different drawing techniques using printmaking media. Students work with metal plate etching and dry point techniques, collagraph, linoleum or wood block printing, and plate lithography. Printmaking media allows students to see the successive conceptual stages an artist goes through in developing an image and encourages them to look at the many possible forms their images could take rather than focusing on one final product (Mrs. Veenema)

306 Advanced Photography

Prerequisites: *Introductory Photography (Art 12)* and *Intermediate Photography (Art 26)*.

306-I-1

Photojournalism. A photograph is a multi-dimensional experience. It can serve to recall persons or events; it can inform, inspire, and raise questions. It is a way of sharing an experience and one's relationship to it. The subject of this course is taking photographs that are deeply and personally felt and which, at the same time, can communicate to a wide audience. The commentary and images of several celebrated photographers will be presented for discussion. Projects will include individual photographs, essays, picture stories, journals, biographies, etc. While independent work is expected, some assignments will be given. (Mr. Wicks)

306-II-3

Large Format Photography. The special qualities of the large camera open up a new world of image making which alters the relationship of photographer to subject and creates options different from the smaller formats. View camera swings and tilts, perspective and depth of field control, sheet film processing, advanced metering and exposure methods, and techniques of the fine photographic print are covered. A survey of the aesthetic and stylistic development of photography in the nineteenth and twentieth centuries is taught. Students explore the many possible

approaches to their own photography in this historical context. Extensive use is made of the Addison Gallery's collection of original photographs. Large format cameras are provided. (Mr. Sheldon)

306-III-2 Studio Photography. Concentrating on portraiture and fashion photography, studio strobes are used to achieve controlled lighting. Through various darkroom techniques and manipulation, along with individual experimentation, an attempt will be made to express personal ideas. Utilizing professional models from Boston agencies, the course is an introduction to commercial photography. (Mr. Bensley, Ms. McCarthy)

306-IV-3 Photoillustration. Communication of thoughts, feelings, and dreams in an imaginative and personal manner is the main goal of photoillustration. Through various darkroom techniques and manipulation, along with individual experimentation, an attempt will be made to express personal ideas. Initial projects will be assigned to enhance experimentation and problem-solving, followed by independent work to be presented sequentially in book format. The course includes group critiques and discussion of works by several photographers. (Ms. McCarthy)

308—123 Sculpture
(0881) **Prerequisite:** *Visual Studies (Art 10)*. Offers an opportunity to work in practically every material available to the sculptor today, including wood, stone, metal, plastics, plaster, and others. It is therefore possible for students to develop into sculpture concepts discovered in *Visual Studies (Art 10)* or *Three-Dimensional Design (Art 24)* as well as ideas drawn from their own experience. Some outstanding work of recent classes includes the "avocado" by Seymour House '73, a thirty-foot welded construction which is now a permanent addition to the Underwood courtyard. Individual criticism is stressed. (Mr. Shertzer)

309—3 Kinetics
(0893) **Prerequisite:** *Visual Studies (Art 10)*. A search for the aesthetics of movement. Individual inventiveness is stressed as students pursue projects directed toward devices that produce implied or real motion. Self-perpetuated problem-solving situations become one of the prime values and objectives of the course. Projects range from simple mobiles and mechanical sculptures to computer graphics. (Mr. McMurray)

310—123 Architecture

(0901) **Prerequisite:** *Visual Studies (Art 10)*. For Uppers and Seniors. *Three-Dimensional Design (Art 24)* recommended, but not required.

The design of structures for human habitation involves a variety of basic considerations. In the fall, the course will concentrate on functional analysis of sheltered spaces and their organization. The winter term will survey methods of enclosing spaces at different scales and construction techniques, including some architectural detailing. The spring term will combine knowledge gained in the previous terms in a project or projects simulating the experience of architectural practice. The course fills the needs of students who are considering architecture as a field of concentration as well as of those who desire familiarity with the basics of environmental design. Although students are encouraged to take the course for three terms, each segment is planned to accommodate enrollment for that term alone. (Mr. Lloyd)

311—3 Contemporary Communications

(0913) Four prepared class periods. The course examines some of the bases of communication between and among people. Material includes fiction, non-fiction, poetry, drama, motion pictures, and the visual arts. Prerequisites: Successful completion of a course in art, music, or theatre. The course engages in group projects aimed at public presentation. (Mr. Owen, Mr. Lloyd)

314—3 Calligraphy: The Art of Lettering by Hand

(0943) **Prerequisite:** *Visual Studies (Art 10)*. A course designed to develop basic techniques of fine hand lettering beginning with Roman capitals and tracing the historical developments of letter construction, integrating form and function. Practical applications can range from simple matter quotations to illuminated manuscript work. (Mrs. Quattlebaum)

315—1 Advanced Placement in Studio Art

(0951) **Prerequisite:** *Visual Studies (Art 10)*. For Seniors, or for Uppers by permission of the Instructor. Four prepared class periods, Fall term only, to help students with special interest in art or design prepare a portfolio for Advanced Placement. The course will concentrate on preparing work for the "breadth" category of the AP, but will also entail planning courses or projects to fulfill the sections entitled "quality" and "depth." A student enrolled in this course should plan to take at least one art course or project in Winter and Spring terms. (Ms. Spatz-Rabinowitz)

The Classics

The foreign language diploma requirement is competence at the third-year level of a modern or ancient language. Such competence in Latin or Greek is usually established by completing the ninth trimester. Able students may fulfill the requirement at the end of the eighth, or even the seventh, trimester by passing a special examination set by the department.

Two sequences are offered in Latin, the regular sequence of *Latin 10, 20, 30, 40, and 50*, and an accelerated sequence of *Latin 10, 25, 35, and 50*. In Greek the regular sequence is *Greek 10, 20, 30, and 40*, though Upper Middlers wishing to accelerate may want to consider *Greek 10-20* followed by *Greek 30*.

Through the study of Greek and Latin the Department of Classics offers students a direct entry into Greek literature, which is still unsurpassed in excellence, and into Latin, which, as the universal language of church, court, and scholars throughout the formative years of modern Europe, can rightly be termed the mother tongue of Western Civilization, and the surest index to its meaning.

Students have traditionally studied Latin before going on to the study of Greek. However, Greek is equally appropriate as a first language since it is not more difficult than Latin. The Greek alphabet is easily mastered in the first few class meetings, and students quickly discover that the Greek language has poetic and expressive qualities which stimulate the imagination and illuminate man's political and intellectual development.

In addition to language courses, there are survey courses which require no knowledge of Greek and Latin. Through them the Department makes available to all Andover students a broad introduction to Classical civilization: history, literature, mythology, epic, and etymology.

GREEK COURSES

10—0 Greek, First Level

(5010) Five prepared class periods. The course introduces the student directly to the Classical Greek of Periclean Athens through a series of readings which present not only the vocabulary, forms and syntax of the language but also the thoughts, feelings and actions that exemplify the Greek genius. Though preliminary selections are necessarily simplified, within the first

year students are reading excerpts from Plato, Aristophanes, Euripides and Homer.

10-20—0 Greek, First and Second Level, Accelerated

(5020) Five prepared class periods. The course is open to Seniors and Uppers. It covers in one year the essential material of *Greek 10* and *Greek 20*: basic forms and structure, along with ample selected readings from Xenophon and Plato, as an introduction to Greek literature.

13—1 Introduction to Greek

(5031) Four prepared class periods. The course is for students whose curiosity for the Greek language and literature has been aroused by their studies in other areas. For students

who plan some day to study Russian or German, this course provides an excellent introduction into the intricacies of a highly inflected language. The student is also treated to an inside preview of a literature which, over the centuries, has provided inspiration and models for the literature of the Western World. It is a term-contained course, but students wishing to continue with Greek will have the opportunity to do so.

20—0 Greek Second Level

(5040) Five prepared class periods. The course continues the format of *Greek 10*, with further systematic development of reading skills and control of vocabulary, forms and syntax through the medium of more advanced selections from the Greek masterpieces, always with the purpose of understanding the spirit of the people that produced them.

30—0 Greek: Iliad and Odyssey

(5050) Four prepared class periods. Selected books of the *Iliad* and the *Odyssey*, and sometimes a play of Euripides. Students examine the nature of tragedy, heroism, and self-discovery.

40—123 Greek: Historians, Tragedians, Lyric Poets

(5061) Four prepared class periods. In the Fall Term ancient concepts of justice and morality are examined through the works of Herodotus and Thucydides. Human tragedy is explored in a play of Sophocles or Euripides in the Winter Term. The Spring Term is devoted to the study of emotion and self-expression in the Greek lyric poets.

LATIN COURSES

10—0 Latin, First Level

(5110) Five prepared class periods. The purpose of the course is to prepare students for genera

reading in Latin. To that end, thorough training is given in the basic vocabulary, forms and syntax of the language (including all participles, infinitives and subjunctives) along with practice in sight reading. Frequent attention is paid to the relationship of Latin to English. Surveys of Roman history and civilization provide an introduction to "the grandeur that was Rome".

10-20-0 Latin, First and Second Level, Accelerated
(5120) Five prepared class periods. For Upper Middlers and Seniors. A year-long accelerated introductory course covering the essential elements of *Latin 10* and *Latin 20*.

13-1 Introduction to Latin

(5141) Four prepared class periods. The course is

13-2 for students seeking an introduction to the

(5142) Latin language, or those whose studies in other languages (including English) have

aroused their curiosity about the workings of languages (grammar, syntax and vocabulary). It offers special profit and fascination to students of French, Spanish, and Italian, since it illuminates much of what they already know by acquainting them with the mother language. For students who plan some day to study Russian or German it serves as an introduction to the workings of highly inflected languages. It is a term-contained course, but students wishing to continue with Latin will have the opportunity to do so.

20-0 Latin, Second Level: Selected Prose Authors

(5150) Five prepared class periods. During the first term, the course gives a thorough review of

the fundamentals of Latin grammar and begins the reading of Caesar. Caesar's account of his campaigns gives the student insight into the problems of political ambition and international intrigue. The character values to which the Romans attributed their success are examined in readings from Nepos and Livy on the lives of ancient heroes. New students whose first-year Latin course has been less complete than *Latin 10* may be placed by the Department Chairman in a special section of *Latin 20* appropriate to their needs.

25-0 Latin, Accelerated Second Level

(5160) Five prepared class periods. Open to students who have completed *Latin 10* with

high honors and to other qualified students, at the invitation of the Department. After a thorough grammar review in the fall, the course moves through selections from Caesar in the winter and into Cicero by spring, with a sampling of the poetry of Ovid as time permits. There is practice in sight translation and prose composition. Texts are essentially the same as for *Latin 20* and

Latin 30. Successful completion of *Latin 25* enables one to enter *Latin 35* the next fall.

30-0 Latin, Third Level: Cicero, Sallust, Vergil

(5170) Four prepared class periods. Through the writings of Cicero and a variety of other authors, students learn to read Latin prose with increasing ease. The course presents a picture of Cicero's life and times and compares the political unrest and maneuvering of his time with that of our own. The literary importance of Cicero as the creator of a prose style which had a dominant influence on the literature of Europe for centuries is assessed. In the Spring Trimester the student is introduced to Roman poetry through readings in Vergil's *Aeneid*, Book II. The student will begin to understand how Vergil, as heir to the Homeric tradition, gave to epic and to Western poetry in the generations that followed him their definitive form. New students whose first- and second-year Latin courses have been less complete than *Latin 10* and *Latin 20* may be placed by the Department Chairman in a special section of *Latin 30* appropriate to their needs, or in *Latin 25*.

35-0 Latin, Accelerated Third Level

(5180) Five prepared class periods. Open to students who have successfully completed *Latin 25* and to other qualified students at the invitation of the Department Chairman. The course reads extensively in Vergil's *Aeneid* (Books I, II, IV and VI), covering most of the Spring Trimester's reading in *Latin 30* and the year's reading in *Latin 40*. The student thereby gains credit for the fourth-year level and is eligible both to take the Latin Advanced Placement Examination, in the spring and to enroll in *Latin 50* the next fall.

40-123 Vergil's Aeneid

(5191) Four prepared class periods. Through a

(5192) thoughtful reading of Vergil's *Aeneid*, stu-

(5193) dents are introduced to the great classical traditions of epic poetry. The literary form

and beautiful, symbolic content of the *Aeneid* become familiar as the model and inspiration of our western poetical heritage. Homer, as Vergil's well-loved and frequently emulated model, is read in translation; the comparison and contrast of the Homeric tradition with Vergil provide a clear understanding of the Latin author's techniques and purpose. Students electing *Latin 40* all three trimesters will be well prepared to take the Latin Advanced Placement Examination, in the spring.

50-123 Livy and Tacitus; Roman Comedy; Horace and Catullus

(5201) Four prepared class periods, one unprepared

(5202) period devoted to sight work. The course in-

(5203)cludes preparation for the Latin Advanced

Placement Examination. In the Fall Term, selections from Livy's *Histories* give students insight into the foundations of some of the Western World's ideas of government and law. Selections from Tacitus' *Annals* are read as a contrast because of their studied depiction of human excess in tyranny and degradation. In the Winter Term, Roman comedy treats students to the bases of European high comedy and farce. In the Spring Term, the students begin to understand the Roman concepts of moderation versus excess through the writings of the poet Horace, described by a Twentieth Century psychiatrist as "a type of the perfectly integrated personality." The lyric poetry of Catullus reveals the perennial personal emotions found as well in the First Century BC as now.

CLASSICS COURSES

21—1 Classical Civilization: Greece
(5321) Four prepared class periods. For Juniors and
21—3 Lower Middlers. The course surveys the
(5323) achievements of the ancient Greeks from Homeric times through Alexander the Great, including their impact on later civilizations in such areas as literature, art, philosophy, drama, government and science.

22—2 Classical Civilization: Rome
(5332) Four prepared class periods. For Juniors and Lower Middlers. The course introduces students to the civilization of Rome which dominated the Western World politically for a thousand years and culturally for even longer. The developing concepts of politics, law, and empire as we know them today are discussed. The course challenges the students to consider the meaning of the Roman experience in its glorious achievement of the "Roman Peace" as well as in its "Decline and Fall."

For other courses related to Classics, please see: Under History: Ancient History (History 330); Under Interdisciplinary: Mythology; Etymology; Greek Literature in Translation.

English

The diploma requirements in English are to establish competence in writing and reading (normally by successful completion of the *Competence Course*), and to complete the *Literature Sequence* through *Literature C*. For those entering Seniors and Post-Graduates who must take *English 300*, the requirement is reduced by the appropriate number of trimesters. (Seniors and Post-Graduates are interviewed by the Department Chairman before the start of school and in some cases these students may be exempted from *English 300* to enroll in one of the 400 or 500 level English courses.) All new Lowers and Uppers enroll in *Competence*. Students entering the Junior Class are strongly urged to take the normal Junior course, *English 10*, although they may elect to take no English at all. Juniors may not enroll in *Competence*.

The English Department also offers specialized courses for students who have already passed their competence and literature requirements and elect to continue studying English. Related courses, whose prerequisites vary, are listed elsewhere in this booklet: *e.g.*, under Performing Arts, Interdisciplinary Courses, Classics Courses, and Modern Foreign Language Courses in translation. *All English courses meet for four prepared classes a week, unless the course description states otherwise.*

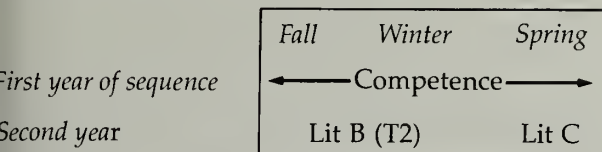
10—0 English

(1100) This course is recommended for all Juniors.

As a foundation for the *Literature Sequence*, the course studies a variety of literary forms and styles. Frequent writing assignments, close reading of such texts as *The Odyssey*, *Great Expectations*, *The Tempest* and regular work with journal entries prepare the student for the *Competence* course in the tenth grade.

Juniors are also eligible to enroll in Etymology, which is described under Interdisciplinary.

Normal Required Sequence (2 years)



(1200) Competence Course

The course is designed to teach basic skills in reading and writing. It enables a student to achieve the competence requisite for the literature sequence and the specialized courses. The course is concerned with the recognition and use of the basic elements of a sentence, sentence patterns, punctuation, paragraph development and coherence, and the composition of unified exposition. The first term emphasizes writing paragraphs and short compositions; the second term includes multi-paragraph compositions and the documented report. The third term focuses on close and accurate reading of the short story and the poem and helps students develop the skill necessary to write about these works clearly and concisely. *Competence* also encourages the acquisition of important reading skills in conjunction with the study of writing. Passages composed by skillful writers are evaluated for organization, logic, point of view, tone, diction, transitional devices. Through the use of the summary sentence, the outline, and the summary paragraph, a student learns to reduce a passage to core ideas. Core Texts: *English Competence Handbook*; *Prose Models*, ed. Levin; *The Modern Tradition*, ed. Howard; *The Norton Anthology of Poetry*.

LITERATURE SEQUENCE

Lit B (T2) (a two-term commitment)

Lit B continues the shift in emphasis, begun in the third term of *Competence*, away from basic writing training to reading and writing about literature. Here students will choose a course centered in one of three modes: Comic, Tragic, or Mythic. Though the modes differ, the objectives of *Lit B* are common to all three: to develop the skills of literary analysis; to teach a sense of literary mode; to develop a sense of historical perspective; to teach the forms of the novel, the poem, the play; to develop literary sensibility; and to apply analytical skills to the writing of papers.

(1224) Lit B—I (The Comic View)

A study of verse and prose works that illustrate the nature, purposes, and techniques of comic writings. Core Texts:

FALL TERM —*Hard Times*
Joseph Andrews
Everyman in His Humor
 Poems by metaphysical poets, Donne to Marvell

WINTER TERM —*Huckleberry Finn*
 Selected works by Swift, Carroll, Cummings and other modern writers.
The Canterbury Tales, the prologue and a number of the Tales.

(1234) Lit B—II (The Tragic View)

This course examines the form and content of a number of works in order to identify and define elements of tragedy that are fundamental to them. The works are arranged in approximate chronological order with a balance being sought in each term among the various genres. Techniques of literary analysis and critical appraisals of the reading are stressed in frequent written assignments. Core Texts:

FALL TERM —*Oedipus Rex*
Wuthering Heights
 Selected Poetry
 Selected Plays by Ibsen

WINTER TERM —A Novel by Thomas Hardy
Heart of Darkness
 A work by Toni Morrison
 Selected Poetry

(1244) Lit B—III (The Mythic View)

The course explores mythic elements in a wide variety of works with the aim of developing a student's ability to respond to and write about literature. Core Texts:

FALL TERM —*The Bible* (selections)
The Odyssey
Agamemnon
 Selected Poetry

WINTER TERM —*Moby Dick*
Invisible Man
 Selected Poetry

(1263) Lit C

An introduction to the study of Shakespeare. At least three plays will be read, one being *Hamlet*, with an emphasis upon close textual analysis.

SPECIALIZED COURSES

Specialized Courses are open to students who have successfully completed *Competence, Literature B* and *C*. Courses numbered in the 500s are more intensive and demanding than those numbered in the 300s and 400s. Each course has four prepared class periods a week, unless specifically stated otherwise. Only courses with sufficient enrollment will be given.

300—12 English

(1301) A special course for all post-graduates and one-year Seniors. Its purpose is to provide the writing and reading skills taught in *Competence* as well as to expose students to substantial works of literature. While reading plays, poetry, short stories, or novels, students undertake intensive writing exercises and learn to write effective papers of greater length. (Mr. Bernieri, Mr. Miller, Mr. Stephens)

401—123 Non-Fiction Writing

(1711) In this course writers will gain practice in these non-fiction modes: personal essay, (1712) analysis, argument, feature writing, and (1713) extended composition. There are daily writing assignments; class work focuses on student editing. The instructors assume that students entering the course write with grammatical and rhetorical competence. Students are encouraged to submit their work for publication in newspapers and magazines. (Mr. Pfeffer, Mr. Kalkstein)

403—123 Introduction to Writing

(1731) An introductory course to the writing of (1732) original stories, informal essays, and poetry. (1733) While examining examples of the genres mentioned, the student tries all these forms. With written permission from the department chairman, a student may take this course before he has completed the normal *Competence-Literature* sequence. (Mr. Owen)

404—1 Hemingway and Fitzgerald

(1741) A consideration of two modern literary contemporaries who captured their era with (1743) equal success, but whose prose styles and temperaments made them unlikely compatriots. Short stories and novels by both authors will be read. In addition, T.S. Eliot's *The Waste Land*, and the work of one other important writer of that time like Dos Passos or Cummings is used as comparative study. (Mr. Stableford)

405—123 Afro-American Literature

(1751) A survey of major Afro-American literary (1752) texts from the late nineteenth century to the (1753) present. Works by Dunbar, Hughes, Wright Baldwin, Ellison, Reed, Morrison and others are closely analyzed and placed in historical context. Each student completes the trimester's work with a project focused on a specific artist, work, or historical event. (Mr. Bernieri, Mr. Sykes)

408—123 American Writers

(1781) A thematic and comparative study of the (1782) novel and drama in America from 1850 to (1783) the present. Representative authors are Hawthorne, James, Wolfe, O'Neill, Fitzgerald, Dos Passos, Hemingway, Williams, Faulkner, West, Styron, Agee, Cather, Wharton, Anderson, Steinbeck. (Mr. Cobb, Mr. Bardo, Ms. Thomas, Mr. Price, Mr. Bernieri)

500—23 James Joyce

(1802) The first term is devoted to *Dubliners*, *A Portrait of the Artist*, and *Stephen Hero*, and Ellmann's *James Joyce*; the second to *Ulysses* and *Finnegans Wake* in part. The purpose of the course is to follow the development of Joyce's method and style and to develop the skill to read important and difficult works without the aid of study guides and other secondary material beyond the Ellmann. Although the course may be taken in either term, the student gains a better sense of Joyce's genius by enrolling for two terms. (Mr. Owen, Dr. Germain)

502—12 Irish Literature

(1821) The course will begin with a brief examination (1822) of Irish history and Celtic mythology in order to broaden our appreciation and understanding of the four major writers of the Irish Renaissance: Yeats, Joyce, Synge, and O'Casey. Throughout the term we will try to draw connections between Irish politics and literature, both during the Literary Revival and today, in Northern Ireland, where "the troubles" persist. (Ms. Bussiere)

504—123 Man and God

(1841) The course considers man's search for meaning in what frequently seems to be an inexplicable world. Readings include: *King Lear*, Shakespeare; *As I Lay Dying*, Faulkner; *London*, Day's *Journey into Night*, O'Neill; J.B., MacLeish; *The Fixer*, Malamud; *Crime and Punishment*, Dostoevski; *The Trial*, Kafka; *Wise Blood*, O'Connor; *Nine Stories*, Salinger; *The Birthday Party*, Pinter; *The Cocktail Party*, Eliot; *Zorba the Greek*, Kazantzakis; *The Bluest Eye*, Morrison. (Miss St. Pierre)

508—23 Directions in 20th Century Drama
 (1882) The close study of significant contemporary drama. The winter term focuses on the first half of the 20th Century and plays by Shaw, Chekov, Strindberg, O'Casey, Brecht, Pirandello, and Ionesco are read; the spring term starts with Beckett, and includes plays by Williams, Bolt, Pinter, Albee, Stoppard, and Shepard. (Ms. Braverman, Mr. Owen, Mr. Stableford)

509—1 Shakespeare: The Man, The Times, The Theatre, The Plays
 (1891)
509—3 The course focuses on six plays (representative histories, tragedies, and comedies) and the sonnets, as well as some biographical and historical readings. (Mr. Stephens)

510—123 The Short Novel
 (1901) An examination of the novella, and the genre of the short story with concentration on some fifteen works of comparative literature, including, Chekov's *Ward No. 6*; Mann's *Death In Venice*; Lawrence's *The Fox*; Tolstoy's *The Kreutzer Sonata*; James' *The Beast in the Jungle*; Stendhal's *The Cenci*; Greene's *The Third Man*; Melville's *Billy Budd*; Stevenson's *Dr. Jekyll and Mr. Hyde*. (Dr. Theroux, Mr. Pepper)

512—123 Satire and Comedy
 (1921) A study of both the theories and practice of satire and comedy, with emphases on the eighteenth century and the modern period. Works by authors like Pope, Swift, Sterne, Ben Jonson, Waugh, and Heller will be studied in conjunction with the visual art of Hogarth and Steinberg, and recordings of modern performers like Peter Cook, Dudley Moore, Mel Brooks, and Peter Sellers. (Mr. Regan)

513—123 Novel & Drama Seminar
 (1931) The course concentrates on major works of literature since 1880, primarily on the works of Virginia Woolf, Henry James, David Storey, Franz Kafka, Flannery O'Connor, T.S. Eliot, Samuel Beckett, Eugene O'Neill, William Faulkner, Gunter Grass, Saul Bellow, Gabriel Garcia Marquez, Grace Paley, John Barth, Isaac Bashevis Singer, Robert Stone, Elie Weisel, Harold Pinter, Bertolt Brecht, and Vladimir Nabokov. Students study the "world" of each writer and compare it with that of the others. As a basis for the comparison with the classics of the past, they also study a Greek Tragedy and *The Brothers Karamazov*. Class periods are devoted to seminar discussions (often led by students) and critiques of student writing. Students regularly stage dramatic readings, cast and performed by the class. (Mr. Wise)

514—123 Creative Writing
 (1941) A writing course in poetry, short fiction and drama. Content and emphasis shall be determined by each instructor. Fall: Introduction to creative forms; Winter: Poetry, Short Fiction; Spring: Poetry, Short Fiction, Drama. (Mr. Just, Mr. Smith)

515—123 Literature of the Quest
 (1951) Focusing on the ancient pattern of the journey, the thresholds crossed and the vision obtained, the course asks students to interpret elements of the quest from a variety of perspectives. In the Fall Term readings include Socrates' *Euthyphro* and *Oedipus Rex*, the Abraham cycle, Beckett's *Waiting for Godot*, and Eliot's *The Waste Land*. The Winter Term considers the suffering encountered on the quest and explores themes from the gospel of Mark, *King Lear*, *The Great Gatsby*, Wiesel's *Night*, West's *Miss Lonelyhearts* and Flannery O'Connor's *Everything That Rises Must Converge*. The Spring Term questions the journey's end, reading the Amor and Psyche myth and *Alice in Wonderland*, comparing Jacob and Jesus and ending with two tragicomedies: *The Tempest* and *Who's Afraid of Virginia Woolf?* (Mr. Zaeder)

518—3 Spenser and Milton
 (1963) Students read minor works of both authors as well as Spenser's *The Faerie Queene* (Books I-II) and Milton's *Paradise Lost*. (Mr. Kalkstein)

520—123 Images of Woman
 (1971) This course will examine, through the study of literature, woman as she perceives herself and as she is perceived by others. It will explore works by both men and women writers and will focus on the constant and the changing image of woman in different literary periods. Readings will include: *Northanger Abbey*, Austen; *Jane Eyre*, Bronte; *Hedda Gabler*, Ibsen; *Measure for Measure*, Shakespeare; *The French Lieutenant's Woman*, Fowles; *The Awakening*, Chopin; *The Mill on the Floss*, Eliot; *The Scarlet Letter*, Hawthorne; *Surfacing*, Atwood; *A Room of One's Own*, Woolf; *Diving Into the Wreck*, Rich; *Song of Solomon*, Morrison; *Tell Me a Riddle*, Olsen; *As I Lay Dying*, Faulkner. (Ms. Harper, Ms. Braverman, Ms. Dobson)

527—3 Chaucer and His Age
 (1983) The sophisticated ingenuousness of the Middle Ages as seen in works by two of its greatest practitioners, Chaucer and the *Garwain*-poet. The focus of the course is a study of *The Canterbury Tales* in Middle English. *Sir Gawain and the Green Knight* will be read in translation. (Mr. Wilkin)

528—2 Wit and Poetry in the Seventeenth Century
(1992) A study of the several types of concentrated, witty poetry that dominated the early seventeenth century—the work of Donne, Jonson, Herbert, and Marvell—and of the profound effect that these poets have had on later poets like Hopkins and Eliot. Although the focus of the course is poetry, some of the background material is prose, from Elizabethan sources to the modern literary critics. (Mr. Zaeder)

The following Theatre courses, which are related to English studies, have no prerequisites: Theatre 22 (Public Speaking), Theatre 28 (Shakespearean Workshop), and Theatre 53 (Playwriting). Other courses related to English are Art 311 (Contemporary Communications) and, in the Interdisciplinary section, a number of literature in translation courses and Basic Study Skills, Language Skills I & II, and Efficient Reading Skills.

History and the Social Sciences

To satisfy the Department's diploma requirement in 1983-84, the student must successfully complete United States history (*History 300-T2 and 301*) and a fourth trimester of another 300-level "survey" course.

If a student has had two previous trimesters of non-United States history or social science during the Junior/Lower years at Phillips Academy (or the equivalent in the 9th or 10th grades at another school) *plus* a sufficiently high score on the History Qualifying Test, then the student may satisfy the fourth-trimester requirement by taking either a 300 "survey" or a 400 "seminar." The 400-level seminars are open *only* to seniors, with exceptions made by the department chairman.

The History Qualifying Test (H.Q.T.) will be given to all Lower Middlers in the spring of 1983 and to all entering Upper Middlers, Seniors, Post-Graduates, and foreign students during the orientation period in September 1983. The purpose of the test is to place these students in the appropriate level of history study:

1) For some, the H.Q.T. will indicate that the student is to begin the four-term sequence by taking *History 250*, either in the fall of 1983 or the spring of 1984. The student would then complete the requirement sequence by taking *History 300 (T2)* and *301*.

2) For others, the H.Q.T. will indicate that the student is ready to begin the *History 300 (T2)* and *301* sequence in September 1983 (although the student may choose instead to begin the sequence in September 1984). To complete the diploma requirement, such students must take one additional 300-level course beyond *History 301*. (The requirement is to encourage students to branch out and study non-United States history and social science). Students may take that additional 300-level course *only after* completing one term of the regular *History 300 (T2)*, *301* sequence.

3) Finally, the H.Q.T. will indicate whether students who have had a U.S. history course in the 11th or 12th grade at their previous school should take a term of *History 250* or a term at the 300-level or 400-level to complete the four-term diploma requirement. Actual placement in these cases will depend on the individual's combination of previous non-United States history courses, the H.Q.T. score, and the judgement of the Department Chairman.

One of the courses offered for Juniors and Lower Middlers—*The Emergence of Man*—is designed to introduce the students to a culture different from their own. A second—*Early American Society*—stresses historical topics other than politics prior to the Revolutionary period.

The History Department *recommends* that during the Lower Middle year each student should take one term of biographical study. The selection should be made from *History 200*, *210*, and *220*. The Department believes that study in one of these courses will not only give the student an introduction to history through the study of great men and women but will also enable him to acquire certain fundamental skills in preparation for upper-level history and social science courses. The Department will emphasize various skills in reading, note-taking, the definition of historical and social science terms, the use of evidence, and the writing of historical essays.

The courses in history offered to Upper Middlers and Seniors are based on the conviction that a knowledge of the past is essential if an individual is to function effectively as a citizen in a modern democracy.

The courses at the 300 level are thought of as "surveys," introductions either to non-United States areas of the world (e.g., Latin America), or to historical periods different from the life span of the United States (e.g., the Middle Ages), or to social science disciplines other than history (e.g., Economics).

The 400-level seminar electives will be issue-oriented trimester courses and will use both historical and social science concepts and skills. To make possible effective discussion the seminars will be limited to 12 students; each seminar will meet 3 times a week; and there will be a greater expectation of independent reading and writing.

COURSES IN THE SOCIAL SCIENCES

100—1 Anthropology: The Emergence of Man

(2701) Four prepared class periods. Primarily for Juniors. This course concerns itself with the origins and nature of humanness, tracing those developments which make Man the unique animal he is. Among the specific topics covered during the term will be primate behavior, the evolution of culture and language, toolmaking, and contemporary hunter-gatherer societies. Emphasis will be placed on both anthropological and archaeological techniques, as well as on reading and writing skills. In addition to readings, use will be made of films and filmstrips, and students will become familiar with fossil casts and artifacts, through the resources of the Peabody Museum of Archaeology. (Mr. Richards)

100—2 Anthropology: The Emergence of Society

(2712) Four prepared class periods. Primarily for Juniors. This course traces the development of human society from the primitive Cro-Magnon bands of the Upper Pleistocene through the early river-valley civilizations of the Near East and equivalent New World advances. Specific topics covered during the term will include the origins of food-production, the growth of villages and cities, the advent of writing, the meaning of civilization, the state and the citizen. Emphasis will be placed on both anthropological and archaeological techniques, as well as on reading and writing skills. In addition to readings, use will be made of films and filmstrips, and students will become familiar with the resources of the Peabody Museum of Archaeology. (Mr. Richards)

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Each of the above courses may be taken separately, but students whose schedules permit should consider taking them as a sequence, in order to obtain a full understanding of the early development of human beings and society.

HISTORY COURSES

100—1 Early American Society

(2001) Four prepared periods. For Juniors and Lower Middlers. A topical survey of pre-revolutionary American society, the course is designed to acquaint students with skills in historical exposition. Topics include the family, slavery, commerce and farming, religion and the arts. (Mr. Crawford)

200—2 European Biography I

(2102) Four prepared class periods. Open to Lower Middlers and selected Juniors. The course deals with the lives of men and women in Europe from the Middle Ages to the eighteenth century. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, and biographers' methodologies are all components of this study. (The Department)

210—3 European Biography II

(2113) Four prepared class periods. Open to Lower Middlers and selected Juniors. This course looks at the lives of both heroic and average men and women in the Europe of the 19th and early 20th century. Biography is used as an historical tool to study the qualities and characteristics of leadership and of a century. Each individual is set in his historical and national context. Biographies read may include Napoleon, Bismarck, Queen Victoria. (The Department)

220—2 American Biography

(2122) Four prepared class periods. For Lower Middlers and a limited number of Juniors. As a comparative study of American leaders, the course deals with the lives of men and women who made significant contributions in several fields of endeavor. Biog-

ographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, contemporary American eras, and biographers' methodologies are all components of this study. Course materials include selected biographies in paperbacks: *The Autobiography of Frederick Lewis Douglass*; Monica Sone, *Nisei Daughter*; Esther Forbes, *Paul Revere and the World He Lived In*. (The Department)

250-1 American Biography for Uppers

(2151) Four prepared class periods. For Uppers

250-3 whose H.Q.T. scores require a term of pre-

(2153) liminary history study prior to *History 300*

(T2) and *301*. The primary difference between *History 250* and the other *History 200s* is that the readings in *250* are geared to older students and the subject matter is more explicitly related to preparation for *History 300* (T2) and *301*. As a comparative study of American leaders, the course deals with the lives of men and women who made significant contributions in several fields of endeavor. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, contemporary American eras, and biographers' methodologies are all components of this study. Course materials include several biographies in paperbacks: Saul K. Padover, *Jefferson*; Robert V. Remini, *Andrew Jackson*; Stephen B. Oates, *The Fires of Jubilee: Nat Turner's Fierce Rebellion* (The Department)

300—12 The United States (T2) (a two-term commitment) (2204)

300—23 Four prepared class periods. For Upper

(2205) Middlers and Seniors. This course, along with *History 301* and *History 250* or a *300* or *400* level history or social science course, according to placement on the H.Q.T., fulfills the four term history diploma requirement. History at the *200* level taken as a Lower does not count as one of the four term diploma requirements. The first term emphasizes three goals—a survey knowledge of American history through Reconstruction by reading a text, John A. Garraty's *The American Nation*; the acquisition of skills by daily exercises in reading, note-taking, and writing; and an in-depth study of American federalism through intensive focused readings and writing. The second term emphasizes American Industrialization from the post Civil War years to 1940. The threefold goals of the first term, a survey knowledge, skills, and analytical mastery of an organiz-

ing theme, continue; but the variety of readings and writings and the complexity of the materials increases. (The Department)

301—1 The United States

(2211) Four prepared class periods. For Upper

301—3 Middlers and Seniors. The focus is on twentieth century America to the present, with

(2213) an emphasis on American foreign policy. In

this term the writing of a research paper represents a major part of the work. **Prerequisite:** successful completion of *History 300* (T2). In the fall of 1983 the *Washington Interns and Urban Studies* participants of the Spring of 1983 will take *History 301-1* with Ms. Dalton.

302—12 American History for Foreign Students

(2221) Four prepared class periods. A course for

(2222) students for whom English is a second language and whose H.Q.T. scores indicate

they are not ready for *History 300* (T2) and *301*. The course will emphasize language skills important to the study of American History and the subject matter will focus on the founding of the republic, constitution building and how the American Government works, the westward movement, the Civil War and the coming of urban-industrial, multiethnic America. The intention of the course is to recognize the special needs of the students and to bring them to a level of achievement so they may transfer to the *300/301* sequence in the winter or spring term, if the students wish to be candidates for the diploma. (Mrs. Lloyd)

A student must have completed one trimester of History 300 or have credit for U.S. History from another school before enrolling in another 300 level course.

Survey Courses—300s

The courses at the *300*-level are thought of as "surveys," *introductions*, either to non-United States areas of the world, or to historical periods different from the life span of the United States, or to social science disciplines other than history.

COURSES IN THE SOCIAL SCIENCES

310—1 Introduction to Economics

(2811) Four prepared periods. For Seniors who

310—3 have completed *History 300* (T2) or the

(2813) equivalent. This course is an introduction to methods of economic analysis and their ap-

plication to problems which confront this country and

the world. Students will examine the historical origins of economics, the underlying assumptions, and the principal critiques. (Ms. Amster, Mr. Williams)

315—3 History and Mathematics

(2833) Four prepared periods. **Prerequisite:** Permission of the Instructors. This course provides an introduction to the ways of which elementary mathematics is employed in the study of history. Attention focuses on three main areas: elementary statistics and data analysis; entertaining historical controversies; and the logic of historical inquiry—that is, how to design a history research project. To accomplish these purposes, participants do assigned homework problems in mathematics and read exemplary works in the field, in order to discuss their merits and demerits. Most of the reading is from two books, Hubert M. Blalock, Jr., *Social Statistics*; and Robert P. Swierenga (ed.), *Quantifications in American History*. (Mr. Quattlebaum, Mr. Best)

320—1 Food and Hunger in Developing Countries

(2821) Four prepared class periods or the equivalent. Students in this interdisciplinary course will examine the extent and the causes of world hunger through selective reading, data analysis and interpretation, and discussion. What is hunger? What are the interconnections between food supply and population, climate, trade, food aid policies, development, land use patterns, and agricultural methods? What can be done to improve the world food situation? We will examine these questions from different analytical perspectives—historical, economic, political, geographic, cultural, biological, and ethical—and through country case studies. Each student will write and make an oral presentation of a case study of hunger in a particular country. (Mrs. Goetze, Dr. Avery, Mr. Williams)

325—3 Urban Studies Institute (Formerly *Social Science 420*)

Senior and qualified Uppers who are not involved in year-long courses may elect for their entire spring course program to participate in a ten-week exploration of the American city, including field work six hours each week. Lawrence, Massachusetts, its history and its present shape, its people and their special problems and opportunities, will be the focus of study, but the context will be drawn through investigation of broad historical, social, and economic issues which affect most of urban America. Lawrence has always been an immigrant city, and one-third of Lawrence's public school students are now of Hispanic background. In addition to their academic course work, Phillips seniors will explore a central aspect of urban life by serving as tutors in an intensive English language training program for a group

of these Lawrence children; the tutoring program, which will be designed by Institute students and staff, will use dramatization and one-to-one tutoring to strengthen the children's oral and literary skills. Knowledge of Spanish or familiarity with theatre will be useful, but not essential.

All students will take a course in Caribbean History and a course in Urban History, as well as a core course introducing developmental psychology and ethnic studies in such a way as to inform and support the fieldwork project. Students will meet periodically in evening seminars with outside speakers.

Seven to ten Phillips Academy students will be selected by interview and special application. Seven to ten students from college preparatory courses in Lawrence and Andover high schools will be selected in the same way. Apply to Susan M. Lloyd by December 1, 1983, for information and application forms. In the fall of 1984 members of the Class of 1985 who took Urban Studies the previous spring, and who have taken *History 300* (T2), but not 301, will take 301. (Mrs. Lloyd, Ms. Rodriguez-Walter, Mr. Quattlebaum)

HISTORY COURSES

330—123 Ancient History

(2301) Four prepared class periods. For Upper
(2302) Middlers and Seniors. The course is concerned with Greek and Roman history from the Minoan Period to the beginning of the Medieval Period. Each term represents a coherent and independent unit. In the Fall Term the survey ends with the world empire of Alexander the Great. The Winter Term covers the period from the beginning of Rome until its transition from Republic to Empire. The Spring Term is concerned with Roman Empire and the transition from Roman to Medieval History. (Mr. Krumpe)

332—1 Social History of the Middle Ages

(2321) Four prepared class periods. For Upper Middlers and Seniors. The course starts with the reshaping of Roman laws and customs by the rapidly emerging Christian doctrine; these in turn are changed by the invasions of the Germanic peoples. Charlemagne serves as the prime illustration of this medieval combination of attitudes. As Europe moved into the Renaissance, humanism and rationalism dignified woman as the 'Lady' of courtly love; at the same time the fear of woman as the 'witch' haunted Europe. (Fr. Gross)

334—123 Modern Europe: A Survey

(2341) Four prepared class periods. Open to Upper
(2342) Middlers and Seniors. The Fall term consists of a background survey of the 16th, 17th, and 18th centuries, with particular emphasis

on the political, economic, and intellectual revolutions that helped to mold the modern world. The focus of the Winter Term is the period 1800-1900, with continuing attention given to the shaping of modern thought, the emergence of the nation-state, and the effects of industrialism. In the Spring Term, the course covers topics in 20th century Europe; the two World Wars, and their effect; the nature of totalitarianism; the cold war and the rise of the superpowers. (There will be two sections offered in the Winter and Spring terms.) Reading is from primary and secondary sources, as well as fiction. Visual materials are used where appropriate. The full year course has proven to be a good preparation for the Advanced Placement Examination in European History. (Mr. Royce, Mr. Richards)

336—1 Tudor England

(2361) Four prepared class periods. For Upper Middlers and Seniors. The years when England was ruled by the Tudor family were some of the most colorful and pivotal in English history. The focus is on Elizabeth I and her England, with a lesser emphasis on the earlier Tudors. Social and cultural conditions are studied, as well as political and economic conditions. Readings are taken from a variety of primary and secondary sources; writing exercises are an integral part of the course. (Miss Minard)

337—1 Victorian England: England in an Age of Expansion (Not offered in 1983-1984.)

Four prepared class periods. For Upper Middlers and Seniors. The course is devoted to a study of the major movements and changes that challenged the British people from 1789 to 1901. It is divided into three periods: a study of the background of 1832, the early Victorians, and the late Victorians. The final eight weeks of the course are concerned with the last two periods. Since Victorian literature more directly influences the life and thought of the times than that of any other period of English history, the course examines closely those writers whose works were influential in adapting English minds and institutions to changing conditions. (Miss Minard)

338—12 Modern Russia: History and Literature

(2381) This course, for Seniors only, examines the
(2382) past 150 years of Russian history and culture in somewhat greater depth than is possible in the one-term course (*History* 339). Though either term may be taken alone, students are urged to treat it as a two-term commitment. The first term is devoted to Imperial Russian history and culture, with an examination both of Tsarist institutions and the growing revolutionary movement. The second term is devoted to Soviet

Russia since 1917; the course concludes with a close look at the U.S.S.R. today and its prospects for the future.

Considerable attention is given to the study of literature. From the days of Pushkin in the early 19th century, Russian writers have been viewed by the government with fear and suspicion. This is because, despite police harassment, and censorship, they have continued to write fearlessly about the most pressing issues of their times. As the course examines the significant events and ideas of modern Russian, it also examines the reflection of these events and ideas in the fiction and memoirs of such authors as (in the Fall Term) Pushkin, Gogol, Turgenyev, Dostoevsky, Tolstoy, Chekhov, and Gorky, and (in the Winter Term) Mayakovsky, Zamiatin, Babel, Olesha, Solzhenitsyn, and writers of the contemporary underground press known as *samizdat*. (Mrs. Powell and Mr. Richards)

339—3 The Soviet Union

(2393) Four prepared class periods. Open to Upper Middlers and Seniors. After an initial examination of Russia's medieval and early modern background, the course focuses on the past hundred years of Russian history, with a careful study of the revolutionary changes which have transformed that country internally and created one of the great powers of the contemporary world. Although the general orientation is chronological, the course focuses on specific topics of particular significance: the tension between East and West; the rise of the intelligentsia; Lenin and the Bolshevik Party; the Stalinist totalitarian system; Soviet foreign policy; the contemporary Russian mind. Emphasis is placed on political affairs and especially the Revolution of 1917, but considerable attention is also given to economic, social, and cultural matters. Reading is from a wide variety of sources, both primary and secondary, and also works of fiction. Visual materials, principally films, are also used. (Mr. Richards)

See also Russian 13 in the Modern Foreign Language section.

340—13 Modern China

(2401) Four prepared class periods. For Upper
(2403) Middlers and Seniors. After an introduction to traditional Chinese thought and institutions, the course will concentrate on events since 1800 in China. There will be much emphasis on China's response to the West, on economic, intellectual and political developments during the nineteenth and twentieth centuries. The emphasis will be on political developments in the fall, and on art, literature and philosophy in the spring. The classes will include both lecture and discussion. (Mrs. Sizer)

342—2 Modern Japan

(2422) Four prepared class periods. For Upper Middlers and Seniors. After an introduction to traditional thought and feudal social structure in Japan, the course will move to a closer look at ideas, events and developments since 1800. An attempt will be made to understand the unique way in which Japan responded to the challenge of the West. Readings will be in historical texts, impressions of contemporary observers, sociological descriptions and literature, with a special effort to understand the outstanding features of Japanese culture, politics and economics through analysis and discussion. (Mrs. Sizer)

344—2 Africa and the World

(2442) This course will focus on contemporary issues facing the new nations of Africa, based on an historical analysis of the emergence of Africa from the colonial period. Political and economic development of these countries, the relations between developed and developing states, the emergence of majority rule in Southern Africa, and the role of Africa in the United Nations will be studied. Readings will include analyses of the issues African nations confront in the modern world, novels about Africa, and speeches and articles by African statesmen. (Mr. McNemar)

346—1 The Middle East

(2461) Four prepared class periods. For Upper Middlers and Seniors. Few if any regions of the world claim a more compelling interest than the Middle East. From its ancient site of half the earth's cultural antecedents, birthplace of three world religions, landbridge of three continents, eternal East-West corridor, and ceaseless crossroads of conquerors, pilgrims, and tradesmen, the Middle East derives a distinctive character of its own. This course traces the region's history from the advent and spread of Islam through the Ottoman and Safavid empires to western imperialism and the present situation. (Mr. Bunnell)

348—12 Latin American Studies

(2481) Four prepared class periods. For Upper Middlers and Seniors. The History and Spanish Departments offer this interdisciplinary course to by provide an analysis of social and political structures through the study of their historical and cultural development. The course will give special attention to current developments and United States policies towards these countries. The fall focuses on Mexico; the winter, on Central America; and the spring, on the Caribbean. (The spring is reserved for students in the Urban Studies Institute.) (Ms. Rodriguez-Walter)

Seminar Courses—400s

The 400 level seminar electives, for Seniors (with exceptions made by the department chairman), will be issue-oriented, trimester courses and will use both historical and social science concepts and skills. To make possible effective discussion the seminars will be limited to 12 student; each seminar will meet three hours a week; and, there will be a greater expectation of independent reading and writing.

COURSES IN THE SOCIAL SCIENCES**410—1 The Modern American Presidency**

(2921) This seminar explores the historical development and institutional structure of the American presidency. Presidential power, the executive's working relationship with the other branches of government, presidential personality and his popular appeal, and the historic growth of the "imperial presidency" are topics covered in this course. The course consists of class discussions, lectures, exams, and a seminar paper. The readings are drawn from: Richard Neustadt, *Presidential Power*; James Barber, *Presidential Character*; Arthur M. Schlesinger, Jr., *The Imperial Presidency*; and J. Anthony Lukas, *Nightmare*. (Ms. Dalton)

415—2 American Race Relations

(2932) This seminar investigates the development of racial thoughts and feelings in the United States, and shows how such attitudes have taken social and legal form. We begin with a brief search for the origins of colonial racism, and then contrast patterns of antebellum slavery in the South with antislavery movements and antiblack restrictions in the North. After an examination of the role of blacks during the nation's civil war and reconstruction, we consider the causes and consequences of nativist moves to disfranchise and ostracize racial minorities in this century. Recent issues of civil and economic rights—how to reconcile assimilation with separation, Birmingham with Boston, *Brown* with *Bakke*—receive substantial attention. Emphasis in class is on energetic discussion and frequent writing. (Mr. Williams)

425—3 International Relations: The Present Patterns

(2953) This is a seminar on the Cold War with emphasis upon the politics of the world's two superpowers,

the United States and the Soviet Union: how they created the United Nations, the Cold War, the many alliances, the nuclear arms race, and the numerous confrontations between themselves and their respective allies; how, too, they prompted the formation of the Third World and repeatedly intervened in its affairs with financial aid, advice, arms, alignments and troops; and finally, some reasons why they continue to perpetuate these massive manifestations of their great power. Textbook and periodicals are employed. (Mr. Bunnell)

430—3 Men, Women and American Culture

(2963) This seminar is designed to help students understand the experiences of men and women in American culture from the Victorian age to the present. Using interdisciplinary materials from social and intellectual history, psychology, anthropology, and literature, this course will explore how American culture has defined its ideals of masculinity and femininity since the mid-nineteenth century. We will study a variety of topics: Victorian sexuality, sex roles on the frontier, the "cult of true womanhood," moral reform in the Progressive Era, manliness and the Strenuous Life, sex roles in the Roaring Twenties, the family and the Great Depression, the return of domesticity in the Fifties, and the pros and cons of the Women's Liberation Movement. The course will include lectures, films, discussion, guest speakers, exams, and several papers. Reading will include Peter G. Filene's *Him/Her Self: Sex Roles in Modern America*; Elizabeth and Joseph Pleck, *The American Male*, and other books and articles. (Ms. Dalton, Mr. Rotundo)

HISTORY COURSES

450—2 A Social History of Families in America

(2652) This seminar is based on the assumption that the social structure of American Society is dependent on the nature of the family. Family constitution has changed over time because of immigration, changing sex roles and mores, the creation of the concept of adolescence, and women's liberation among other reasons. This course will examine these developments as well as changing relationships between husbands and wives and parents and children from the colonial period to the present. Readings are drawn from primary and secondary sources. Students are asked to write a series of critical essays as well as the history of their family in America. (Ms. Amster)

460—2 American Urban History

(2662) This seminar places heavy emphasis on such seminar skills as selective reading, effective writing *via* nine brief weekly papers, oral presentations,

analytical and interpretive thinking. The work focuses not only on definitions of "city" and "American city," but also on the proper role of the historian toward the city, on the evolution of the city from prehistoric times, and on different "types" of American communities and cities—such as Lowell, Washington, Oneida, New York, Salt Lake City, Los Angeles—evolving between the Eighteenth and Twentieth Centuries. The course entails occasional visits to Boston and Lawrence, and continuous monitoring of ten urban newspapers, such as the *Atlanta Constitution*, *Chicago Tribune*, and the *Denver Post*. General readings include: Edward Banfield, *The Unheavenly City Revisited*; Lewis Mumford, *The City in History*; urban novels like Theodore Dreiser, *Sister Carrie*; and monographs like like Gunther Barth, *City People*. (Mr. Quattlebaum)

The following course is offered because the Academy's Archives are probably the best in American secondary education. Since the course is neither a "survey" — 300 nor a "seminar" — 400, the course does not count as one of the four trimester requirements for graduation. This tutorial-research opportunity is a unique offering in American secondary schools.

(2692) Topics in the History of Phillips Academy and Abbot Academy

The course involves work in the Phillips Academy and Abbot Academy Archives on some aspect of the history of the schools; the course introduces the student to the problems of working with the raw materials of history. Permission of the instructor is required for enrollment. (Mrs. Quattlebaum)

Interdisciplinary

All courses are electives. Courses in this section may be taken during more than one trimester unless the individual description indicates to the contrary.

(9501) Basic Study Skills

(9502) Four class periods. Not open to Juniors in the Fall. The course is designed to help students build effective study skills through understanding more about the learning process. Class discussion focuses on the problems of motivation, concentration and retention. Exercises are designed to work on improvement in each of these areas and to develop proficiency in planning studying time, in develop-

ing accurate yet flexible reading comprehension, in taking notes or marking books, and in preparing for exams. When possible, students' texts from other courses are used for instruction. This course may be taken for at most one term. **Prerequisite:** permission of the instructor. (Ms. Brown)

(9511) **Efficient Reading Skills** (Formerly *English 18*)

Four class periods. Recommended for Upper Middlers and Seniors, this course is designed to teach strategies for increasing reading efficiency and comprehension. It places particular emphasis on techniques for reading textbooks and novels, vocabulary development, and the improvement of comprehension through analysis of assigned readings. (Mrs. Brother)

(9522) **Language Skills I** (Formerly *English 16*)

(9523) Four class periods. Open to Juniors and Lower. This course is designed for those students who need supplementary help in overcoming weaknesses in writing, spelling and vocabulary. Specific assignments are geared to the needs of each student. Open only to students who have permission of the instructor. (Mr. Brown)

(9533) **Language Skills II** (Formerly *English 17*)

Four class periods. Seniors and Uppers who need help in writing essays and research papers may elect this course for the Spring Term only. Organizational skills, paragraph and sentence structure, and theme development will be reviewed depending on students' individual needs. Students must have permission of the instructor. (Mrs. Brother)

(9351) **Etymology**

(9352) Four prepared class periods. For all classes.

(9353) Training in the interpretation of English words by systematic analysis of elements derived from Greek, Latin and other Indo-European languages. Exercises expand vocabulary and develop precision of expression and understanding. The course may be taken for at most one term.

(9371) **Greek Literature in Translation**

(9372) Four prepared class periods. Open to all classes. A systematic study of the masterpieces of early European civilization as seen in their proper literary, intellectual, and historical context. In what is essentially a history of ideas, the major *genres* of epic, tragedy, comedy, satire, history, erotic poetry, and philosophy are stressed as aspects of the wider evolution of early European thought which laid the basis for modern civilization.

The major problems which still confront human life are explored through the writings of Homer, Aeschylus, Sophocles, Euripides, Herodotus, Thucydides, Aristophanes, Plato and others. This course may be taken for at most one term. (Dr. Pottle)

(9362) **Mythology**

(9363) The interest of the Twentieth Century in Classical Mythology has stemmed from three main sources: the psychoanalytical use of myth, progress in the field of classical archaeology, and anthropological study of myth. Preliminary exploration of the works of Freud in psychology, Schliemann and Evans in archaeology, and Frazer, Graves, and Levi-Strauss in anthropology leads to the detailed study of the myths of Oedipus, Theseus, and Agamemnon among others. The myths are considered living entities changing in the hands of each artist who deals with them whether it be Homer or Joyce, Aeschylus or O'Neill, an anonymous Greek vase painter or Dali, Euripides or Strauss. Works of literature, art, and music provide the core for the study of the use of myth in human life. This course may be taken for at most one term. (Mr. Krumpe)

(9401) **Russian Literature in English**

Four prepared class periods. The themes of romanticism, realism, the "superfluous person," Slavophilism, westernism, nihilism, perfectionism, and humanism are examined in the works of Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Ostrovsky, Dostoyevsky, Tolstoy, Chekhov, and Gorky, both as styles of literary expression and as stimuli of Russia's social and political development. (Mr. Lane)

(9412) **Soviet Literature in English**

Four prepared class periods. A study of the conflict of individual freedom and social purpose in Russia since the Revolution, based on selected translations. Socialist realism, satire, divided personality, and dissent are examined against the Soviet political and economic background and in the perspective of Russian literary traditions. (Mr. Lane)

(9601) **Typing**

(9603) This course in personal typing is open to all students; it is designed for beginners to learn the keyboard and basic typing skills. There is no charge, but students must supply their own typewriters. This course does not earn academic credit. (Mrs. DiClemente)

For other courses which are interdisciplinary in nature, see Art 311 and Social Science 320.

Mathematics

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late twentieth century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his energies and curiosity to the organization or dissemination of mathematical knowledge.

The mathematics curriculum is built around a core sequence of eight trimester courses: three of elementary algebra, two of geometry and three of precalculus topics. The completion of these eight trimesters will satisfy diploma requirements, but an additional trimester may be required of some students before entering the calculus. Placement of new students in the appropriate first course is made by the department considering the record in previous schools, the results of a self-administered diagnostic test in elementary algebra which is sent to newly admitted students in the Spring, and the course program chosen by the entering student. In general, algebra courses taken before the eighth grade and geometry courses taken before the ninth grade will not earn placement credit. Examinations to validate first and second year algebra skills are given early in the Fall trimester, at which time students who are incorrectly placed can be shifted to higher or lower level courses.

Students entering with no prior study of algebra start with *Mathematics 10*; those with a partial year of algebra enter *Mathematics 11*. Students entering with a full year of algebra start with *Mathematics 20-12*. If the results of placement testing indicate a need for *Algebra Review*, then students who have not taken geometry start with *Mathematics 19-1* and continue to *Mathematics 20-23*.

Those who have taken one year of algebra and one year of geometry will satisfy diploma requirements by taking the first three precalculus trimesters: either *Mathematics 30*, or *Mathematics 32* and *35 (T2)*.

If, on the basis of our testing, a student's algebra skills are weak, then *Mathematics 25-0*, intermediate algebra course, may be required before precalculus.

It is best to take the College Entrance Examination Board Achievement Test in Mathematics near the end of or immediately following the precalculus sequence.

For students who wish to go beyond the required level, the department offers many electives, some of which lead up to and beyond the Advanced Placement Calculus Examinations of the College Board. The prerequisites of these electives courses should be noted, particularly by students who are involved in Off-Campus Programs.

Computer

In addition to its course offerings, the department houses the campus computer time-sharing system. The computer, a Digital Equipment Corporation PDP-11/70, is housed in the Mathematics building and serves sixteen terminals, of which ten are available for student use.

The department also has microcomputers available for student use. At the present time there is one Radio Shack TRS-80 Level III with disk drive, six Apple II with disk drives, an IBM 5110, and two Hewlett Packard HP-85. Printers and software for each type of micro are also available.

Hand Calculators

Every student taking Mathematics or Physical Science must have a suitable hand calculator capable of handling square roots, sines, cosines, reciprocals, logarithms and exponents. Any calculator with *sin*, *log* and inverse function keys is adequate for all course use.

COURSES LEADING TO SATISFACTION OF THE DIPLOMA REQUIREMENT:

10—0 Elementary Algebra

(3100) Five prepared class periods. A year-long course for students who have had little or no algebra. Stress is placed on an understanding of the elementary structure and language of the real number system, on the manipulative skills of simplifying expressions and solving first and second degree equations, and on the study and graphing of polynomial functions. Significant work is done with word problems, inequalities, irrational numbers, right triangle trigonometry, and an

introduction to computer programming in BASIC. **Prerequisite:** None.

11—0 Elementary Algebra

(3110) Five prepared class periods. A year-long course for students who have had previous instruction in algebra but whose knowledge and skills are not strong enough to enter the regular second level course. The topics covered are the same as *Mathematics 10—0*. **Prerequisite:** A half to a full year of algebra.

19—1 Algebra Review

(3191) Five prepared class periods. A course for students who enter with a full year of algebra whose knowledge and confidence indicate they need a brief review of algebra. **Prerequisite:** A full year of algebra.

20—12 Geometry (T2) (a two-term commitment)

(3204) Five prepared class periods. A two-term course for students who have had a *strong* 20—23 (3205) ninth grade algebra course, but no geometry. This course is a thorough and systematic presentation of synthetic Euclidean geometry. Strong emphasis is placed on the need for precision and clarity in the writing of formal proofs. **Prerequisite:** A complete course in elementary algebra comparable in coverage to *Mathematics 10—0*.

25—0 Algebra Consolidation

(3250) Five prepared class periods. A course for new students entering Phillips Academy with one year of algebra and one year of geometry. Required of those students whose elementary algebra or whose general mathematical maturity may prove inadequate to sustain precalculus studies. Comprehensive review of elementary algebra. Coordinate geometry. Introduction to algorithms and use of the computer. Extended problem solving. This course will normally be followed by a precalculus course.

30—0 Precalculus

(3300) Five prepared class periods. A year-long course for students with one year of algebra and one year of geometry. Completion of this course satisfies the diploma requirements. Topics include use of the computer; the structure of groups and fields, with applications to elementary algebra; polynomial, circular, exponential and logarithmic functions and their applications.

Upon completion of the course, students with department permission may enter *Mathematics 51—1*, or *Mathematics 55—0*. Those who do not receive permission must first take *Mathematics 36* if they wish to enter the

calculus sequence. **Prerequisite:** Credit for one year of algebra and one year of geometry, or *Mathematics 20—23*.

31—0 Geometry and Circular Functions

(3310) Five prepared class periods. A year-long course for entering students who have not studied geometry. The course covers Euclidean and coordinate geometry, the circular functions and their geometrical applications. **Prerequisite:** Credit for one year of elementary algebra and one year of intermediate algebra.

32—3 Precalculus

(3323) Five prepared class periods. Topics in intermediate algebra, including sets; properties of real numbers; factoring; fractions; exponents; radicals; solutions of linear, quadratic, and radical equations. **Prerequisite:** *Mathematics 20*, or its equivalent.

35—12 Precalculus (T2) (a two-term commitment)

(3354) Five class periods, four prepared and one unprepared. More topics in intermediate algebra, including use of the computer; absolute value; inequality; linear, quadratic, polynomial, exponential, logarithmic, trigonometric, and inverse functions; graphing and applications of these functions. Completion of this course satisfies the diploma requirement. **Prerequisite:** *Mathematics 32*, or its equivalent.

40—12 Elementary Functions (T2) (a two-term commitment)

(3404) Five prepared class periods. A two-term course for entering Seniors who have not had trigonometry but have studied three years of mathematics in high school. Required of those students whose prior work fails to satisfy diploma requirements. Work focuses on a review of the fundamentals of algebra, and the elementary functions. Enough trigonometry is done in the Fall Trimester so that students with high quality work may satisfy the diploma requirements and take *Mathematics 50—23 (T2)*. **Prerequisite:** Credit for three years of high school mathematics. Not open to students from *Mathematics 30, 35, or 36-3*.

ELECTIVE COURSES

Only courses with sufficient enrollment will be given.

33—3 Exploring Data

(3333) Four prepared class periods. An introduction to techniques of uncovering the useful information contained in masses of numerical data. No

reliance is placed on the knowledge of or development of heavy mathematical tools. **Prerequisite:** None.

36—1 Precalculus

(3361) Four prepared class periods. Required of students coming from 35 (T2) who plan to study

36—3 calculus. Topics that bridge the gap between

(3363) algebra and calculus, including exponential,

logarithmic, circular and trigonometric functions. In the Fall Term, students who have not taken 35 (T2) and who do poorly on in-class testing may be placed in the first term of 40(T2). **Prerequisite:** *Mathematics 35* or its equivalent.

41—1 Probability

(3411) Four prepared class periods. Includes sample

41—2 spaces, counting problems, sampling,

(3412) conditional probability, random variables, expected value, variance, standard deviation,

binomial and normal distributions. The computer is used on applications that are too time-consuming to perform by hand and to simulate experiments for which there is no model. **Prerequisite:** *Mathematics 30* or *35*.

42—2 Statistics

(3422) Four prepared class periods. Applications of

42—3 various distributions, hypothesis testing,

(3423) statistical inference and data organization.

Prerequisite: *Mathematics 41*.

43—3 Problem Solving

(3433) Four prepared class periods. A variety of non-routine problems drawn from some of

the major ideas of precalculus mathematics, requiring various degrees of insight and creativity, will be considered. A synthesis of mathematical knowledge and methods will be the major goal of the course. For example, an inequality might be developed both algebraically and geometrically and then applied to problems in Solid Geometry, Trigonometry and Logarithms. **Prerequisite:** *Mathematics 30* or *35* (may be concurrent).

50—23 Elementary Calculus (T2) (a two-term commitment)

(3505) Four prepared periods. This course, for Seniors only, does not specifically prepare for the Advanced Placement Examination. The approach to calculus is concrete, informal and applied, as opposed to abstract, deductive, and theoretical. Topics include applications of the derivative and integral to problems of optimization, curve sketching, rate of change, area, volume, and work. Techniques will be developed to apply derivatives and integrals to logarithmic, exponential, trigonometric

and inverse functions. **Prerequisite:** *Mathematics 36—1*, or an equivalent course in trigonometry and elementary functions.

51—1 Elementary Calculus

(3511) Five prepared class periods. The first of a

51—3 three course sequence that covers the syllabus

(3513) for the AB Advanced Placement Examination of the College Entrance Examination

Board. Topics covered include: review of functions and graphing, theory of the definite integral, introduction to the derivative and its applications. **Prerequisite:** *Mathematics 30* with department permission; *Mathematics 36*, or the equivalent.

52—12 Elementary Calculus (T2) (a two-term commitment)

(3524) Five prepared class periods. Course finishes

52—23 the AB Advanced Placement Syllabus. Theory

(3525) of the derivative, Chain Rule of differentiation,

related rates, Rolle's Theorem, Mean Value Theorem, techniques and applications of integration, Fundamental Theorem of the Calculus. **Prerequisite:** *Mathematics 51*.

54—3 Infinite Series and Differential Equations

(3543) Five prepared class periods. This course extends

the work of *Mathematics 52* to prepare the student for the College Board BC Advanced Placement Examination. **Prerequisite:** *Mathematics 52* or may be taken simultaneously with 52.

55—0 Honors Calculus

(3550) Five prepared class periods. A year-long

course in analytic geometry and calculus which begins only in the Fall. Students contemplating Off-Campus Projects at some time during the year should not enroll in this course. Enrollment is limited to able and committed mathematics students, as the coverage is more theoretical and extensive than that of *Mathematics 51*, *52*. Satisfactory completion of this course prepares for the College Board BC Advanced Placement Examination. **Prerequisite:** *Mathematics 30* or *36—3*, and departmental permission.

61—23 Calculus Continued (T2) (a two-term commitment)

(3615) Four prepared class periods. The course

completes preparation for the College Board BC Advanced Placement Examination, but may include additional topics at the discretion of the instructor. Students from *Mathematics 55* or others with satisfactory grades on the BC Advanced Placement Examination must have departmental permission. **Prerequisite:** *Mathematics 52*.

65—0 Calculus of Vector Functions

(3650) Four prepared class periods. For students of demonstrated ability and interest. Vectors and the geometry of 3-space, functions of many variables, partial differentiation, multiple integration, line integrals, Green's Theorem, Stokes' Theorem, linear transformations and matrices. **Prerequisite:** *Mathematics 55* or its equivalent.

68—123 Mathematics Seminar

(3681) A course for students who have finished
(3682) *Mathematics 65*. The topics studied will vary
(3683) according to the needs and interests of the students. **Prerequisite:** *Mathematics 65*.

COMPUTER COURSES**17—1 APL For Beginners**

(3171) Four prepared class periods. An introduction to the APL language and programming techniques. Designed to complement elementary algebra courses. No prior programming knowledge required. **Prerequisite:** For Juniors and Lower currently enrolled in *Mathematics 10, 11, or 19*.

27—1 Computer Literacy

(3271) Four prepared class periods. A one-term course in programming in the LOGO language for students with little or no previous experience with computers. For those students who are interested in learning how they might utilize the computer in their future education, research, avocations, and day-to-day lives. Topics, which will be introduced through the use of sophisticated pre-programmed packages, may include graphics and animation, financial modeling and forecasting, word processing, data acquisition and information sharing. Students will program simplified versions of these important tools. Modular design, structured programming, and list processing will be stressed. **Prerequisite:** none. Not open to Juniors in the Fall or Winter of 1983-84.

47—1 Beginning Computer

(3471) Four prepared class periods. An introduction to programming in the BASIC-PLUS code. The solution of mathematical problems with computer assistance. Depending on the instructor, the focus may be on a central theme such as cryptanalysis, statistics, data processing, or linear programming. **Prerequisite:** *Mathematics 20*. Not open to students from *Mathematics 27*.

49—3 Intermediate Computer: PASCAL

(3493) Four prepared periods. The course will introduce the PASCAL language and include such topics as text editors, compiled languages and data types. **Prerequisite:** *Mathematics 27, Mathematics 47* or permission of the department.

57—0 Computer Science

(3570) Five prepared class periods. A year-long course in algorithms and data structures using primarily the PASCAL language. The emphasis is on programming methodology, including program definition, top-down design by stepwise refinement, testing, style, and documentation. Arrays, strings, lists, and trees are among the data structures considered. The curriculum is guided to a large extent by the Course Description of the College Board Advanced Placement Examination in Computer Science. Enrollment is limited to 15 able students committed to a thorough course in computer science. **Prerequisite:** Precalculus and permission of the department. With department permission, students who have had *Mathematics 49* may join the course at the Winter Trimester. In 1983-84 the **prerequisite** will be *Mathematics 27* or *47*.

SPECIAL COURSES

Mechanical Drawing 30, 31, and 32 are given at the same time in the same room by the same instructor, with the total number of students being limited by the number of work stations.

30—1 Mechanical Drawing (Elementary)

(3701) Two prepared class periods and four unprepared. Not open to Juniors. A term-contained beginning drawing course that includes the use of drawing instruments, lettering, geometric constructions and loci, sketching, orthographic projection, and spatial relations. Special stress is placed on a thorough mastery of fundamental concepts and skills.

31—1 Mechanical Drawing (Intermediate)

(3711) Two prepared class periods and four unprepared. A term-contained technical drawing course in applied Descriptive Geometry and Graphics involving work in sectioning and conventions, isometric and oblique pictorial projections, intersections, primary auxiliary views, and developments. **Prerequisite:** *Mechanical Drawing 30*.

32—1 Mechanical Drawing (Advanced)

- (3721) Two prepared class periods and four unprepared. A term-contained technical drawing course consisting of substantial work in dimensioning, inking, detail and assembly engineering drawing, print reading, perspective and/or fundamentals of design.

Prerequisite: *Mechanical Drawing 31.*

In general, *Navigation 30* is given in the Fall and Winter and *Navigation 31* is given in the Spring. Depending on the availability of the instructor both courses are sometimes offered in the Spring.

30—1 Navigation (Coastal Piloting)

- (3731) Four prepared class periods. Not open to Juniors. A term-contained course in Piloting: i.e., marine navigation within sight of land or landmarks. Substantial dead reckoning and special case plotting is done on charts and small area plots. Aids and dangers to navigation are studied. Practical use is made of Tide and Current Tables, Light Lists, compass correction, and electronic aids.

31—2 Navigation (Celestial)

- (3742) Four prepared class periods. A term-contained course in Celestial Navigation: i.e., navigating at sea by means of the stars, sun, moon, and planets. Nautical astronomy is studied. Significant work is done in coordinate conversion, time, altitude intercept theory, the solution of the Navigational Triangle by HO 214, HO 229, and the Nautical Almanac, special lines of position, the use and correction of a marine sextant, times of observational twilight, and "a day's work" at sea. **Prerequisite:** *Navigation 30.*

Modern Foreign Languages

Andover's requirement of at least three high-school years of an ancient or modern language rests on the firm belief that direct acquaintance, through language, with the spirit and people of other lands is a psychological and intellectual resource of inestimable value for each individual, for every country, and for our common world.

The diploma requirement is satisfied by completion of three trimesters at the 30-level reached through the regular sequence, or by one trimester of 40-level reached through the accelerated sequence. Placement of new students is based on their previous school record, on the questionnaire sent to them and their current language teachers in the spring, and, when appropriate, on a personal interview with the language chairman at Andover. Details regarding various options and the diploma requirement as it is applicable to "incoming Uppers and Seniors who begin a new language at Andover" are available from the Registrar's Office.

With the exception of Italian and Chinese (limited to Seniors), each of our languages, ancient and modern, may appropriately be started by students of any grade, Juniors (9th) through Seniors. Many Andover students continue their language study beyond the third year, and a good number of them simultaneously study two or even three languages.

Small classes, flexible placement, and opportunities for acceleration assure that each student is in the optimum learning situation. The foreign language is the language of the classroom. In conversation, in reading, and in writing, the goal is direct communication in the foreign language rather than through translation. The classroom experience is expanded by the language laboratory; media resources (e.g., periodicals, radio broadcasts, movies); the staging of plays; club activities; language events and programs at Andover or nearby schools. At all levels of instruction attention is focused both on basic language skills and, increasingly, on the literature, history, and various art forms which reveal the people whose languages are being studied.

For information on School Year Abroad and other opportunities to study abroad, students should see their language instructor or the chairman of the Language Division.

Chinese

10-20—0 Intensive Chinese

(4420) Five prepared class periods. Open to Seniors, with permission of the Language Division. An introduction to modern spoken and written Chinese (Mandarin), stressing pronunciation and oral-aural facility, and including the reading and writing of characters. Extensive use of language laboratory.

French

The French Department offers a six-year course of study. The first two years are devoted to teaching the basic language structures. Students who demonstrate unusual aptitude and interest are invited to enter special accelerated sections. In the third year, while continuing to progress in all language skills, a student is given the opportunity to choose trimester courses which best serve his needs. Fourth and fifth-year courses offer study in depth of both literature and civilization. At all levels, French is the language of the classroom.

10—0 Beginning French

(4010) Five prepared class periods. First-year French for students who have had no previous courses in the language. Students make frequent use of the language laboratory. Listening comprehension and the use of basic patterns of French speech are emphasized. Elementary grammatical and idiomatic structures are introduced, as well as simple reading material. Text: *Méthode de Français*, Boorsch-Capretz.

11—0 First Level French

(4030) Five prepared class periods. This first-level French course is designed to help the student who has had previous instruction in the language, but whose knowledge and skills are not secure enough for him to enter a regular second-level section. It is also appropriate for students with experience in other languages who wish to begin the study of French. The course emphasizes the development of aural-oral skills and prepares for French 21 the following year. Text: *Méthode de Français*, Boorsch-Capretz.

21—0 Second-Level French

(4060) Five prepared class periods. For students who have completed French 10 or 11 and for new students who qualify through teacher recommendations or placement examination. While continuing to develop aural-oral skills, the aim of this course is to teach reading and the ability to understand non-techni-

cal French prose. Texts: Pucciani et Hamel, *Langue et Langage*, Campbell et Bauer, *La Dynamite*; Sempé-Gosciny, *Le Petit Nicolas*.

22—12 Accelerated Second-Level French (T2) (a two-term commitment)

Five prepared class periods. An accelerated Honors course open to qualified students with permission of Chairman. Successful completion of this course permits students to enroll in regular courses at the third level during the Spring Term. Texts and reading materials include Sempé-Gosciny, *Le Petit Nicolas*; Sartre, *Les Jeux son faits*; Sturges, Cregg, Herbst, *Une fois pour toutes*, Kirkland, Knox, *A mon avis*. By permission of Department Chairman.

Third-Level Courses

All electives may be chosen in any sequence: they are of equal difficulty, continue the development of all language skills, and are unified by a common grammar syllabus (Sturges, Cregg, Herbst, *Une fois pour toutes*). The Department urges students to seek variety and balance in choosing electives.

31—123 Selected Readings

(4101) Four prepared class periods. Reading comprehension skills are developed through a study of texts such as the following: Simonon, *Le Chien Jaune*; Saint-Exupéry, *Le Petit Prince*; Pagnol, *Topaze*; Vercors, *Le Silence de la mer*; Gosciny, Uderzo, *Astérix et Obélix: Le Tour de Gaule*; Camara Laye, *L'Enfant Noir*, Sartre, *Les Jeux Sont Faits*.

32—3 Village Français

(4113) Four prepared class periods. Using, as points of departure, the impressions and misimpressions which French and Americans have of each other's culture, this course attempts to give the student a greater understanding of the French people and their institutions as reflected in the microcosm of a town. With the student's hometown as a basis of comparison, several French towns are examined in depth, including the provençal towns of Roussillon and Cassis and a town of the student's own choice. The basic text, Wylie, *Village en Vaucluse*, is complemented by readings, lectures, original documents and both national and regional newspapers and magazine articles.

33—1 French History

(4121) This course concentrates on the main events and personalities from the reign of Louis XIII to the founding of Third Republic in 1875. There is a combination of lectures by the instructor, class discussions, slides and film presentations. Text: *Imitation à la culture française*, Hester, Parker et Grigaut.

34-1 Intensive Conversation

- (4131) Four prepared class periods. A special emphasis on specific aspects of spoken French.
 (4132) Intended for students who understand French rather well but need to gain confidence and fluency in speaking.

Dialogues, speeches, debates, interviews, and role-playing are reinforced by study of topical vocabulary and idiomatic expression. Text: Myron and Smetana, *Perspectives*

35-2 Written Expression

- (4142) Four prepared class periods. Study and writing of basic sentence structures and their integration into paragraphs and compositions.

Students' writing, to which instructors give close, individualized attention in small classes, is based generally on selected, short readings. The course seeks a balance between different forms of writing, both original and imitative (description, narration, dialogue, exposition, communication). Text: Limouzy et Bourgeacq, *Manuel de composition française*

36-2 Literature and Film

- (4152) Four prepared class periods. Usually two works of fiction are studied along with two films each term. The books and films for the course vary from year to year.

37-123 Le Journalisme

- (4161) Four prepared class periods. The course consists of a series of journalistic assignments—
 (4162) from opinion polls to want ads—each designed to reproduce the style of a section of a French magazine. Before handing in the draft of each assignment, the group discusses journalistic models, works on exercises based on structures in the texts, and writes pastiches together using vocabulary from given lists. At the end of the course teacher and students may act as editors of a class magazine.

39-3 Initiation to the French Theatre

- (4173) Four prepared class periods. An active participation course in which the student follows one play from the initial reading through its final production, taking part in each of the four major phases: Reading, Analysis, Production, Performance. Throughout the course, the vocabulary of French theatrical production is studied and used.

40-123 Fourth-Level French

- (4181) Four prepared class periods. The course consists of three term-contained units and may include the reading of French classics and the works of modern authors, as well as con-

versation and composition. The choice of texts in each trimester is determined by the class and the instructor.

42-123 French Literature

- (4191) Four prepared class periods. The first year of a two-year sequence leading to the Advanced Placement Examination in French Literature, open to students who have completed three trimesters of third-level courses, or French 22 plus one third-level trimester course; also open to properly qualified new students. It is a transition from the study of language to the study of literature. Emphasis is placed on vocabulary building, written work, and close analysis of major literary works. Text include: Camus, *L'Etranger*; Voltaire, *Candide*; Sartre, *Huis clos*; Balzac, *Le Colonel Chabert*; and Mauriac, *Thérèse Desqueyroux*; Duras, *Hiroshima mon amour*. Permission of the Department Chairman required.

This course is also offered in the School Year Abroad program in Rennes.

43-12 French Civilization

- (4201) Four prepared class periods. For students with a particular interest in France's past civilization and cultural achievements. A thematic study is made of the great periods of French civilization from its origins in Celtic Gaul through the end of the 19th century. Areas studied include historical, social, artistic, and literary developments. Each course is a combination of lectures, class discussions, slides, films, and students' oral reports. It is complemented by the reading of short literary and historical selections.

The first trimester begins with an introduction to French geography and then examines ancient Gaul, the era of Charlemagne, medieval society, the Renaissance, and the "Grand Siècle" (17th century). The second trimester studies the ideas of the philosophers and revolutionaries which influenced European and American life and political institutions. Also discussed are the important social and economic changes brought on by the Industrial Revolution.

43-3 Le Monde Francophone: French Civilization Outside of Europe

Four prepared class periods. As an international colonial power France spread her culture throughout the world. The course studies the resistance to and the assimilation of French culture by the native cultures. The student has the opportunity to study the 17 French civilizations of West, Equatorial, and North (Arab) Africa as well as the French civilization of the Antilles (Haiti, Martinique, and Guadeloupe). In addition to geographical, social, and historical study, selections are read from authors such as President Senghor, Cheikh Hamidiou Kane. Aimé Césaire, Guillaume Oyo M'Bia, Birago Diop. (Not offered in 1983-84. Offered in 1984-85).

43—3 Québec et les Québécois

(4203) Four prepared class periods. Some amount of theory is balanced with observation and analysis of everyday life in Québec province to understand its political, economic, and social institutions, and such areas as religious, educational, and artistic life. Emphasis is on a close study of the media of Québec as well as personal involvement through liaison with Québec schools, students and newspapers, and through contact with French-speaking areas of Massachusetts and New Hampshire. The course may culminate in a trip to Québec. (Offered in 1983-84. Not offered in 1984-85).

44—1 Advanced Conversation and Phonetics

(4221) Four prepared class periods. Intended for students who understand, read and write French well and who already speak at a competent level, but who feel the need for further drill in conversational patterns, and idiomatic expression. Diction, intonation and elocution are also stressed through memorization, role-playing, speeches, and debates. Text: Knox, *Rencontres*.

51—123 Advanced French Language

(4261) Five prepared class periods. A course designed to meet the requirements of the Advanced Placement Examination in French Language. Open to students who have completed three terms of fourth-level French and to qualified new students. Emphasis is placed on vocabulary, conversation, composition, and reading, not only in literature, but in current newspapers and periodicals. The choice of texts is determined by the class and the instructor.

52—0 Advanced French Literature

(4270) Five prepared class periods. The second year of a two-year sequence, open with departmental permission to students who have completed French 42 and to others who are properly qualified. This course is an introduction to French literature and prepares for the Advanced Placement Examination in French Literature through the close reading of representative texts including: La Fontaine, *Fables*; Molière *L'Avare*; Racine, *Phèdre*; Beaumarchais, *Le Barbier de Seville*; Chateaubriand, *René*; Flaubert, *Un Coeur Simple*; Balzac, *Les Fleurs du Mal*; and poetry of Hugo, Rimbaud, Apollinaire, Césaire and Damas.

60—123 Contemporary French Literature

(4281) Two prepared class periods plus one weekly (4282) (90 minute) seminar. The course studies selected novels and dramas representative of the Pre-War and Post-War eras. Emphasis is on particular writers and what they add to our understanding of the human condition in our times. Authors studied may include: Proust, Gide, Céline, Malraux, Mauriac, Aragon, Saint-Exupéry, Giono, Montherlant, Anouilh, Giraudoux, Aymé, Camus, Sartre, Robbe-Grillet, and Daninos.

(9001) **Senior Projects**
 (9002) Qualified seniors may undertake independent study projects in French under the direction of a faculty supervisor. Those who wish to do apprentice teaching during either the Winter or the Spring Term will study the techniques and methods of modern language instruction and will practice, under careful supervision in beginners classes.

(9001) Senior Projects

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German

The German Department offers a six-year course of study with the purpose of developing the ability to understand spoken German, facility in speaking, reading fluency, and the ability to write German correctly. Students who demonstrate unusual aptitude and interest during the first year are invited to enter special accelerated sections.

The more advanced courses may give an introduction to German literature since the eighteenth century and a survey of German history, culture and geography. At all levels, German is the language of the classroom. Extensive use is made of the Language Laboratory.

10—0 First-Level German

(4300) Five prepared class periods. The beginning course seeks to develop aural comprehension and oral expression, as well as a foundation in the basic grammar. The basic patterns of the language are practiced by repetition and variation. Basic Text: *Deutsch Heute*, by Moeller and Liedloff (Houghton Mifflin).

12—23 First-level German (Honors) (T2) (a two-term commitment)

(4305) Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of one trimester of German 10. Successful completion of 12 enables students to enter 22. Texts are essentially the same as those used in German 10 and German 20.

10-20—0 Accelerated First and Second-Level German

(4310) Five prepared class periods. Open to Seniors, and to Uppers with permission. A year-long accelerated introductory course covering in one

year the essential material of *German 10* and *German 20*. Basic text: *Deutsch Heute*, by Moeller and Liedloff (Houghton Mifflin).

20—0 Second-Level German

(4320) Five prepared class periods. The systematic study of basic patterns and grammar is continued. Both close and comprehensive reading of modern German prose is practiced extensively. Elementary writing is introduced at this level. Some of the books read include Kessler, *Kurze Geschichten*; Schnitzler, *Der blinde Geronimo*; Remarque, *Drei Kameraden*.

22—0 Accelerated Second-Level German

(4330) Five class periods. A year-long accelerated course open to students who have successfully completed *German 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth-level courses. Texts and reading materials are essentially those of *German 20* and *German 30*.

30—0 Third Level German: Selected Readings

(4340) Four prepared class periods. Emphasis is placed on reading comprehension, vocabulary building, and oral expression. Throughout the year grammar is reviewed in Sparks and Vail, *German in Review*. Some of the books read include Brecht, *Kalendergeschichten*; Dürrenmatt, *Der Richter und Sein Henker*; Aichinger, *Der Gefesselte und andere Kurzgeschichten*; Dürrenmatt, *Der Besuch der alten Dame*; Ödön von Horvath, *Jugend ohne Gott*.

40—123 Advanced German Language and Literature

(4351) Five prepared class periods. This course is designed to prepare for the Advanced Placement Examination in German Language. Open to students who have completed the equivalent of three trimesters of third-level German and to qualified new students. Emphasis is placed on vocabulary, conversation, composition, and reading, not only in literature, but also in current newspapers and periodicals. The choice of texts is determined by the class and the instructor.

50—123 Fifth-Level German

(4361) Four prepared class periods. Contents vary
(4362) according to the needs and interests of the
(4363) students.

60—123 Sixth-Level German

(4371) Four prepared class periods. Contents vary

(4372) according to the needs and interests of the
(4373) students.

(9001) Senior Project

(9002) Under the guidance of a member of the Ger-
(9003) man Department, a Senior has the opportunity to do special work in German. It may include supervised teaching of an elementary class, or work of his own choice in a special field.

Italian

10-20—0 First and Second Level, Intensive (Not offered in 1983-84.)

Open to Seniors, and to Uppers with permission. Five class periods. Four additional hours, to be arranged, will take the place of about 1/2 of the usual homework obligation: these small drill sessions, plus use of the language laboratory, will afford intensive review leading to spontaneity in understanding and speaking Italian. A basic college text is supplemented by selected readings, radio recordings, and the libretti and music of Italian opera. (Dr. Pascucci)

Russian

Communication in Russian and a knowledge of Russian culture are essential for productive interaction with the U.S.S.R. in technology and science, and for achieving controlled, responsible international relations. Before studying Russian, many consider it strange and difficult; but its alphabet and vocabulary have the same sources as English, and it follows the same principles of grammar. Continuous oral, visual and instructional use quickly makes Russian familiar and enjoyable. The Russian Department offers a five-year course of study. This well-established program ensures confident progress in speaking, aural comprehension, reading and writing. Students who demonstrate unusual aptitude and interest during the first term are invited to enter special accelerated sections in the second term. It is the policy of the Department to attain exclusive use of Russian in the classroom no later than the middle of the first year.

10—0 Introduction to Contemporary Russian

(4500) Five prepared class periods. A year-long elementary course in speaking, listening, read-

ing and writing. Texts: Kostomarov, *Russian for Everybody* (Rusky Yazyk-Moscow); reference materials.

12—23 Contemporary Russian (Honors) (T2) (a4515) two-term commitment

Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of the first trimester of *Russian 10*. Successful completion of 12 enables students to enter 22. Texts are essentially those of *Russian 10* and *Russian 20*.

13—3 A Short course in Beginning Russian

(4523) Four prepared class periods. Open to Seniors and Uppers. A term-contained introduction to speaking, reading, and writing Russian, using scientific, literary, and conversational text materials. This course enables students to feel comfortable with the somewhat different features of a Slavic language. It also gives a sound foundation for continuing courses in Russian language, history, and literature, whether at Andover or in college. (Mr. Lane)

For other courses related to Russian history and culture see History 338, History 339, and, in the Interdisciplinary section, Russian Literature in English and Soviet Literature in English.

10-20—0 Intensive Contemporary Russian

(4530) Five prepared class periods. Open to Seniors, and to Uppers with permission. A year-long accelerated introductory course covering two years in one. Texts: von Gronicka, *Essentials of Russian* (Prentice-Hall); Kostomarov, *Russian for Everybody*; *Graded Russian Readers* (Heath).

20—0 Intermediate Contemporary Russian

(4540) Five prepared class periods. Completion of the elementary course with continued emphasis on active use. Texts: Kostomarov, *Russian for Everybody*; reference material and selected reading materials.

22—0 Intermediate Contemporary Russian (Honors) (4550)

Five prepared class periods. A year-long accelerated course open to students who have successfully completed *Russian 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth-level courses. Texts and reading materials are essentially those of *Russian 20* and *Russian 30*.

30—0 Russian Expression: Conversation and Composition (4560)

Four prepared class periods. Reading, conversation and writing. Texts: Khavronina, *Russian as We Speak It* (Progress-Moscow); Reading materials include cultural and scientific selections.

40—123 Advanced Russian Composition and Russian Classical Literature

(4571)

(4572) Four prepared class periods. Further work in conversation and writing, and an introduction to the "Golden Age" (19th Century) of

Russian literature with selected readings from Pushkin, Chekhov, Gogol, Tolstoy and other writers. Texts: Muravyova, *Verbs of Motion in Russian* (Progress-Moscow).

50—123 The Soviet People, Their Heritage and Literature

(4581)

(4582) Four prepared class periods. Fall Term: RUSSIAN LITERATURE, readings from prerevolutionary and contemporary authors.

(4583)

Winter Term: SOVIET PROTEST LITERATURE, a view of protest in the Soviet Union from the works of Solzhenitsyn, Yevtushenko, Okudzhava, Bulgakov, and others. Authors vary according to needs and interests of the class.

Spring Term: THE SOVIET PRESS a view of Soviet Life and culture as reflected in the media. The text is a subscription to a major Soviet newspaper.

(9001) Senior Project

(9002)

(9003) Under the guidance of a member of the Russian Department, a Senior has the opportunity to do special work in Russian. It may

include supervised teaching of an elementary class or work of his own choice in a special field.

Spanish

The Spanish Department offers a six-year course of study. Students who demonstrate unusual ability and interest during the first year are invited to join an accelerated sequence which enables them to complete four years of work in three. The language of the classroom is Spanish, and extensive use is made of the Language Laboratory. Students learn to understand, speak, read, and write the language, and also are given a comprehensive introduction to the literature and culture of Spain and Hispanic America.

10—0 Beginning Spanish

(4600) Five prepared class periods. Making use of the audio-lingual approach the course stresses understanding and speaking. A minimum of English is used in the classroom. Text: *Spanish for Mastery I*, and workbook, Valette and Valette (D.C. Heath). These are supplemented by language laboratory practice, selected readings, and other audio-visual materials. Exercises in reading and writing are introduced after the student has acquired confidence in oral expression.

10A—0 Basic Spanish

(4610) Five prepared class periods. This course begins Winter Term. Designed for students who may profit from a more gradual pace in foreign language study, the course aims to enable the students to better assimilate the structure of the language and to acquire acceptable patterns of speech. Eligibility for this course is determined by an agreement reached by the student and the Foreign language teacher in consultation with the Chairman of the Department involved. Employing a variety of materials, the syllabus for the course will closely follow that of *Spanish 10*.

11—0 First Level Spanish

(4620) Five prepared class periods. For new students who have been exposed to Spanish but who are not fully qualified for *Spanish 20*. The course stresses the oral use of the language. Text: *Spanish for Mastery II*, and workbook, Valette and Valette (D.C. Heath) and selected readings. They are supplemented by language laboratory practice and other audio-visual materials.

10-20—0 Accelerated First and Second-Level Spanish

(4630) Five prepared class periods. Open to seniors, and to Uppers with permission. A year-long accelerated introductory course covering two years in one. The basic texts are: *Spanish One* (Second Edition), by Jones/Ruiz Salvador (Van Nostrand); *Tres Farsas Contemporáneas y Un Secuestro* (see *Spanish 22*).

20—0 Second-Level Spanish

(4640) Five prepared class periods. Emphasis is on speaking, reading, simple theme writing, and vocabulary building, including the use of synonyms and antonyms. Oral fluency is stressed in accordance with the principles of the audio-lingual method. The basic text is: *Adelante* (see *Spanish 22*) Readings beyond the basic text are selected to meet the needs of each class.

22—0 Accelerated Second-Level Spanish

(4650) Five prepared class periods. Open to students who have completed *Spanish 10* or *11* with distinction, and to other qualified students with de-

partmental permission. It covers the equivalent of the material of *Spanish 20* and *Spanish 30* and enables students to enter *Spanish 40* or *42*. Texts: *Adelante*, by Eduardo Neale-Silva, Robert L. Nicholas (Scott-Foresman); *Cuentos y Microcuentos*, by Guillermo Castillo-Feliú (Holt, Rinehart & Winston); *Tres Farsas Contemporáneas y Un Secuestro*, by Martínez-Ballesteros, Rubio and Whitehead (Independent School Press) and selected readings. In Spring Term students occasionally read and stage a one act play in Spanish.

Third Level Courses

Enrollment for *Spanish 30A* is by permission of Department Chairman. All other electives may be chosen in any sequence: they are of equal difficulty, continue the development of all language skills, and are unified by a common grammar syllabus (Couch, McCann, Rodriguez-Walter, Rubio-Maroto, *Una vez más*, Independent School Press). The Department urges students to seek variety and balance in choosing electives.

30A—0 Spanish Language Review

(4660) Five prepared class periods. For students who have successfully completed *Spanish 20*, but need reinforcement in basic language structures. The goals of the course are achieved through the use of an intermediate grammar text, and readings which are selected according to the needs of the students. By permission of the Department Chairman.

31—123 Aspectos de la cultura y civilización del Mundo Hispánico

(4671) Four prepared class periods. An intermediate course which continues to develop oral and aural skills, as well as facility in written composition through a social-studies approach to the culture and civilization of the Hispanic world. Students must have demonstrated, in previous course work, a strong ability for self-expression and an interest in historical and cultural themes.

32—123 Introduction to Literature

(4681) Four prepared class periods. An intermediate course which continues to develop oral and aural skills, as well as facility in written expression. Class discussion and assignments are based on representative works of literature from throughout the Spanish-speaking world.

34—123 Conversation and Composition

(4691) Four prepared class periods. An intermediate course which has as its principal goal the development of conversational and writing skills by dealing with topics of a general and contemporary nature.

35—2 Winter Term in Mexico

(4702) Students enrolled in a Spanish course at the 22 level or above may elect to spend the Winter Trimester in Mexico. Students intending to enroll in this course will do special research during the Fall Trimester under the direction of Mr. Couch and other members of the department. Interested students should see their Academic Advisor to be sure that their other courses and their diploma requirements will permit them to be off campus for that trimester. Final approval for participation in the program will be made by the Dean of Studies.

40—123 Spanish: Language, Literature, Culture

(4711) Four prepared class periods. The purpose of the course is to review, refine and expand speaking, reading and writing skills and to further the student's interest in the Hispanic world through readings in history, literature, and current events.

Students showing marked ability will be eligible to take the A.P. Examination in the Spanish Language. Texts used in the past have been: *Tesoro Hispánico*, ed. Lado et al. (McGraw-Hill); *El Burlador de Sevilla*, by Tirso De Molina (Taurus Ediciones); *Doña Bárbara*, by Rómulo Gallegos (Fondo de Cultura Económica); *Una vez más: Autorretratos*, ed. Durán.

42—0 Spanish and Spanish-American Literature

(4720) Four prepared class periods. The course presupposes an extensive knowledge of grammar and vocabulary and a reasonable fluency in conversation. Constant use of the Spanish language in classroom discussions and in written assignments is required. Particularly able students may take the Advanced Placement Examination in Spanish Literature if they so desire. Texts: Representative works of Ana María Matute, Unamuno, F. García Lorca, J.L. Borges, Pablo Neruda, and other literary works which complement the study of these major authors.

52—0 Advanced Spanish and Spanish-American Literature

(4730) Four prepared class periods. The course is open to students who have the equivalent of *Spanish 40* or 42, or with the permission of the instructor. This course prepares the student for the Advanced Placement Examination in Spanish Literature or Language. The course is an in-depth study of two significant authors

each term. In the past the following texts have been used: *Cien años de soledad*, by García Márquez (Editorial Sudamericana, Buenos Aires); *Tres novelas ejemplares y un prólogo*, by Umanumno (Austral); *Antología Esencial*, by Pablo Neruda (Losada); *Ana María Matute*, Martí and Rubio (Independent School Press); *Cinco Maestros*, by Coleman (Harcourt, Brace and World, Inc.); *Fulgor y Muerte de Joaquín Murieta*, by Pablo Neruda.

60—123 Special Literary and Cultural Topics in Spanish

(4741) Four prepared class periods. Contents vary according to the needs and interests of the student.

(9001) Senior Project

(9002) Qualified Seniors may undertake projects of independent study in Spanish under the direction of a faculty advisor. They may also

do apprentice teaching in beginning classes under faculty supervision.

See also Latin American Studies (History 348) listed under *History and the Social Sciences*.

Music

The diploma requirement in Music for entering Juniors and Lower Middlers is one trimester of music, which is satisfied by *The Nature of Music* (*Music 20* or 21). This course is also a prerequisite for courses in the History and Appreciation and the Theory categories, but is not a prerequisite for the Applied category. Entering Upper Middlers must take a trimester course in Music or Art at the Academy: *Music 20* or its equivalent.

Entering Seniors need not take a Music course. Exemption from *Music 20* as a prerequisite is granted on the basis of an exam and/or by permission of the Department Chairman. However, there is no exemption from the Music diploma requirement.

APPLIED

15—123 Fidelio Society

(6151) Pass/Fail. Three prepared periods. Open to
 (6152) all classes. This small group of mixed voices
 (6153) is selected from the *Chorus* (Music 17). It performs on numerous occasions throughout the year both on *Chorus* programs and on its own. Its repertoire includes music of all types, early and modern, sacred and secular. Membership is by audition and is conditional upon good standing in the *Chorus*.

16—123 Band Two double periods. Open to all qualified students. Tryouts are held any time before the beginning of a term to test the student's ability and to arrange for seating.

Volunteers from all classes who are not enrolled for credit are urged to join, on an extra-curricular basis. There are some school-owned instruments available for student use. All types of music for wind ensemble are rehearsed. It includes marches as well as classical, popular, and show music. Much sight reading is done, and at least one public concert per term is given.

17—123 Chorus

(6171) Two double periods. Open to all qualified
 (6172) students. The *Chorus* is the Academy's major
 (6173) singing group, comprised of mixed voices, and performs a variety of choral works, both sacred and secular. No previous choral experience is necessary; just a desire to work hard and enjoy a unique choral experience.

18—123 Chamber Orchestra

(6181) Two double periods. Open to all classes.
 (6182) Most of the music played is for string orchestra; the best winds in the school are invited to join for larger works. One concert a trimester is regularly scheduled and the orchestra also plays at least once a trimester in the Sunday Chapel service. The membership includes several students from the community who want orchestral experience that is not available in their own schools, and several members of the faculty. While *Chamber Orchestra* may be elected as a credit-bearing course, it is also an activity in which all are invited to participate.

19—123 Private Instrument and Vocal Lessons

(6191) Two class meetings plus required concert attendance. Lessons are available on all orchestral instruments including, in addition, piano (classical or jazz), guitar, saxophone, organ, harpsichord, carillon, and voice.

In addition to practicing daily, the credit students are

expected to meet the following commitments: 1) a once per week meeting with their private instructor; 2) a once per week seminar, providing a broader practical/theoretical background (credit students would be assigned seminar groups according to their instrument and background); 3) a required attendance of three concerts, on campus, per term.

There is a charge of \$140 per term for half-hour instruction, or \$200 per term for full-period (50 minute) lessons, and a nominal fee for use of practice pianos and organs. Orchestral and Band instruments are available for rental. NOTE: Beginners must take two consecutive terms of *Music 19* in order to receive academic credit.

20—1 The Nature of Music

(6201) Five prepared class periods. This course is
 20—2 designed to give a general background in
 (6202) history, theory, and practical aspects of music. Music from its earliest sources to the present is examined. Also, the role of music and the arts in each of its cultural stages is studied. Students receive some first hand experience with musical instruments. No previous experience in music is required.

21—1 The Nature of Music (for Juniors). This

(6211) course covers the same material as *Music 20*
 21—2 (see above), but is designed specifically for
 (6212) those Juniors whose verbal and writing skills may be weak. Juniors with no such demonstrated weaknesses may take *Music 20*.

HISTORY AND APPRECIATION

The Nature of Music (Music 20 or 21) is a prerequisite for all courses in this section.

26—123 Seminar in the History of Music

(6261) Two class meetings. Open to Lower and Upper Middlers and to Seniors. This course,
 (6262) taught in seminar fashion, is one where a
 (6263) great deal of reading, listening, and analysis is expected to take place outside the classroom. The composer or composers and era to be studied each term will be decided by the class and the instructor. (Sample topics: Beethoven and the Era of Revolution; The Life, Times and Music of J.S. Bach.) Hours to be arranged.

27—123 Independent Study in the History and Literature of Music

(6271) Four prepared class periods. Open to Upper
 (6272) Middlers and Seniors. A student who has
 (6273) taken at least one trimester of *Music 26* may, with the permission of the instructor, pursue an inde-

pendent course of study in either a particular type of music or a particular period of music.

28—1 Jazz

(6281) Four prepared class periods. Open to Upper
28—2 Middlers and Seniors. A study of the history
(6282) of classic jazz, dating back to its roots in Africa,
28—3 its development in New Orleans, its
(6283) spreading to New York and Chicago, and its
influence on music today. A survey of ragtime, blues, Dixieland, fox-trot, on through the big band era of the thirties, concluding with the jazz rock of today. A study of the influence and contributions of the major personalities such as W.C. Handy, Jelly Roll Morton, Louis Armstrong, Basie, Whiteman, Gershwin and the rest of the greats.

THEORY

The Nature of Music (Music 20 or 21) is a **prerequisite** for all courses in this section

32-123 Conducting

(6321) Hours to be arranged. Open to Upper
(6322) Middlers and Seniors. A course in conducting and basic musicianship. This course is designed to give the student an introduction to the conductor's world through developing conducting skills and score analysis.

33—1 Theory of Music I

(6331) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course offers an introduction to harmonic progression, triads, modes, rhythmic coordination with dictation. Some original work is also expected.

34—2 Theory of Music II

(6342) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Prerequisite:** *Theory of Music I* or permission of the instructor. This course deals with harmonic progressions, modulations, figure bass, and an introduction to counterpoint and harmonic analysis.

35—3 Theory of Music III

(6353) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Prerequisite:** *Theory of Music II* or permission of the instructor. This course includes advance figure bass, more complex chords, and a brief introduction to nineteenth and twentieth century techniques.

36—1 Electronic Music

(6361) Four prepared class periods. **Prerequisite:**

36—2 *The Nature of Music (Music 20)* or permission
(6362) of the Department Chairman. A course for
36—3 the benefit of those who seek to expand their
(6363) domains of creativity by understanding and
utilizing the conceptual approaches inherent

in electronic music synthesizers and related equipment. Using a practical approach, the course begins with the care and feeding of the tape recorder and proceeds to the functioning and operation of electronic music modules. A lab fee of \$15.00 is charged for the use of the synthesizer.

40—123 Advanced Techniques in Electronic Music

(6401) Four prepared class periods. **Prerequisite:**
(6402) *Electronic Music (Music 36)*. A course designed for the continuation of the skills and techniques developed in *Music 36*. A lab fee of \$15.00 is charged for the use of the synthesizer.

Philosophy and Religious Studies

The department seeks to initiate students into three distinctive human quests: the search for meaning, the search for justice and the search for the foundation of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered at a variety of levels. All courses involve four prepared class periods.

The department diploma requirement is successful completion of any one-trimester course; this requirement applies only to those who attend Phillips Academy for three or four years, beginning with Juniors and Lowers who enter in September 1983.

20—3 The Biblical World View: An Introduction

(7203) Four prepared class periods. Open to Juniors and Lower Middlers. Why was the world created? Why are we humans placed on this earth? What are we like? What should we try to achieve in life? How should we treat one another, other creatures, and the planet on which we live? For many centuries the Bible provided for many people a response to such questions. In our day, however, the message has become both un-

clear and increasingly unfamiliar. In this course we shall look at the composition and the historical setting of the Bible (Old Testament), then read selected passages of Biblical narrative and reflection which introduce persons and principles central to the Biblical view of the world, its inhabitants, and its Creator. (Rabbi Gendler)

21—1 Introduction to Ethics: Discernment and Decision
(7211)

21—2 Four prepared class periods. Open to Juniors and Lower Middlers. Rooted in concrete issues and experiences of everyday living this course provides an introduction to the skills of discernment. Drawing case studies from literary and topical sources, bioethics, law and education, the class will critically investigate the often unspoken presuppositions that give rise to moral decision. (Dr. Avery)

30—1 Introduction to Non-Western Religions

(7301) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. This course provides a brief introduction to four of the world's major religions: Islam, Hinduism, Buddhism, and Taoism. Huston Smith's classic, *The Religions of Man*, is the text. Additional readings are drawn from basic religious texts of the traditions. (Rabbi Gendler)

31—1 Portraits of Jesus

(7311) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. Political activist, false prophet, simple rabbi, Divine Word: who was Jesus of Nazareth? This course provides a critical assessment of the different accounts of Jesus found in Roman and Jewish sources, The New Testament and suppressed Gnostic writings. (Dr. Avery)

32—2 Post-Biblical Jewish Thought: Responses to the Holocaust
(7322)

Four prepared class periods. Open to Lower and Upper Middlers and Seniors. An exploration of the holocaust through diaries, memoirs, works of fiction, poetry, and later reflections on the phenomenon.

Questions to be dealt with will include: what was it like for the victims? What was it like for the Nazis? How could it have happened? What elements from Jewish, Christian and secular tradition contributed to its possibility? What have been some of its effects on our own feelings about life and human beings? How have various Jewish, Christian, and secular thinkers responded to the challenge of this event? (Rabbi Gendler)

33—2 Understanding Religion: An Introduction
(7332) (Formerly RelPhil 40)

33—3 Four prepared class periods. Open to Lower and Upper Middlers and Seniors. A critical examination of human experiences and

practices in diverse religious and non religious contexts, in particular: ecstasy, myth-making, ritual expression and the disciplines of meditation and prayer. Concepts and models of understanding are introduced as useful tools with which to approach the phenomena of religion. (Dr. Avery)

36—2 Proof and Persuasion (Formerly RelPhil 46)

(7362) Four prepared class periods. Open to Lower

36—3 and Upper Middlers and Seniors. A practical introduction to informal logic and to the philosophical study of language. Some of

the questions raised are: What is the difference between a good argument and a poor one? What are the common fallacies of thought? What are the limitations of logic? What is the meaning of "meaning" and the truth about "truth"? The course stresses the development of individual skill in argument and includes a critical examination of the patterns of thought one encounters every day in magazines, newspapers and on television. (Mr. Hodgson)

41—1 Views of Human Nature

(7411) Four prepared class hours. Open to Upper

41—2 Middlers and Seniors, and to Lower

(7412) Middlers with permission of Instructor. A critical examination of existentialism, psychology, biology, anthropology and transcendentalism in light of the answers they provide to the following questions: Does man have a characteristic nature? What are his basic needs, rights, obligations and values? Is man free? Is man responsible for his actions? Given an understanding of man, how should we structure society to satisfy his needs and take advantage of his potentials? Readings: Jean-Paul Sartre, *Existentialism is a Humanism*; R.D. Laing, *The Politics of Experience*; B.F. Skinner, *Walden Two*; Sam Keen, *Apology for Wonder*. (Mr. Hodgson)

42—1 Bioethics

(7421) Four prepared class periods. Open to Upper

42—3 Middlers and Seniors. The growth of the hu-

(7423) man sciences and their corresponding technologies has increased human control over and thus responsibility for the development of mankind. The course addresses particular issues of life and death, genetic engineering, behavior modification, human research and the allocation of medical resources. At the same time the underlying issue of the relationship between science and ethics is considered. (Dr. Avery)

43—1 Law and Morality

(7431) Four prepared class periods. Open to Upper

43—3 Middlers and Seniors, and to Lower

(7433) Middlers with permission of Instructor. A critical examination of an intricate web of problems which arises out of the relationship between

law and morality. Questions of concern include: Does society have the right to restrict the behavior of an individual? On what, if any, grounds are such restrictions justifiable? To what degree should society incorporate "popular" morality into law? Is an individual ever morally justified in breaking the law? If so, under what circumstances and in what fashion? Readings include selections from Plato, Hobbes, R.P. Wolff, Lord Patrick Devlin and Martin Luther King, Jr. Specific issues include abortion, pornography, racial and sexual discrimination and civil disobedience. (Mr. Hodgson)

44—2 Nonviolence in Theory and Practice

(7442) Four prepared class periods. Open to Upper Middlers and Seniors. The militarily most destructive century in human history, our twentieth century, has also been one in which such men as Gandhi and Martin Luther King, Jr., have successfully applied nonviolence to conflict situations. What is the theory of this approach to human conflict? What are some of its psychological assumptions? What is its religious and human significance? By what means does it operate? What are its prospects for the age ahead? We shall use case histories, the testimonies of those directly involved in such struggles, films, critical and theoretical studies in trying to clarify and comprehend some of these elements of nonviolence. Readings include Joan Bondurant's *The Conquest of Violence* as well as writings of Gandhi and King. (Rabbi Gendler)

45—2 Man's Search for Meaning

(7452) Four prepared class periods. Open to all Upper Middlers and Seniors and to Lower Middlers with permission of Instructor. The reflective person is confronted with questions that hunger to be answered yet elude definitive, "objective" answers. The person's faith is often what sustains him/her and provides "subjective" answers to these fundamental questions. The issues of creation, of death, of evil, of identity, of purpose all challenge one's faith. This course (which takes its title from Victor Frankel's book) will consider these issues from a faith perspective using Scripture, literature (i.e. *Equus*, *No Exit*, *The Little Prince*, *The Shadowbox*, *Man's Search for Meaning*, *I Heard the Owl Call My Name*, etc.) and other materials. (Fr. Gross)

50—2 Existentialism

(7502) Four prepared class periods. Open to Upper Middlers and Seniors. The term "existentialism" covers a broad range of attitudes and values that are joined together by an emphasis on human existence. The authors brought together in its name share a characteristic concern for the problems of meaning, identity and choice that confront men and women in everyday life. The lectures, discussions and readings are designed

to help us locate and express these problems as they confront each of us in our own lives and to assist in understanding and resolving them by drawing on the experiences and insights of the major existentialist thinkers. Readings: Nikos Kazantzakis, *Zorba the Greek*; Friedrich Nietzsche, *Thus Spake Zarathustra*; Jean-Paul Sartre, *No Exit* and *Being and Nothingness*; Søren Kierkegaard, *The Sickness unto Death*; Martin Buber, *I and Thou*. (Mr. Hodgson)

51—2 In Search of Justice: from Socrates to Marx

(7512) Four prepared class periods. Open to Upper

51—3 Middlers and Seniors. God, emotion, logic, (7513) social necessity and economic laws have all been invoked as the final arbiter of justice.

The class will examine the major answers to the problem developed by Plato, Aristotle, Mill, Marx and others. The course aims to assist critical awareness of the ultimate criteria of one's own evaluations and those of others so that she/he be better equipped to make her/his own contribution to the never-ending search for justice. (Dr. Avery)

52—1 Great Philosophers

(7521) The great philosophers challenge us to address difficult and fascinating questions that (7523) perennially face mankind: What is the good life? What are the sources of human experience?

Is there anything we can know with certainty? Does God exist? What is the relationship between my mind and my body? This course critically evaluates the responses of Plato, Descartes, Hume and Whitehead. (Mr. Hodgson)

Physical Education

All Juniors and new Lowerers are required to elect one trimester of P.E. 10 in addition to their regular athletic commitment.

10—1 Physical Education

(9201) Pass/Fail. Limit of 15 students per section.

10—2 Five class periods per week. A course integrating health and fitness concepts with self-

10—3 testing and challenge activities; two class (9203) periods per week are spent using the running track, weight room, ropes course and

other areas of the athletic complex. Two class periods are devoted to drown-proofing survival swim technique and C.P.R. training. One period per week is lecture-discus-

sion, requiring some outside reading or other preparation. If the course is failed, the student will repeat it, in full or in part, during a subsequent term.

Psychology

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strategies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained.

32-1 Introductory Psychology

- (7021) One double period and two prepared class periods; for Uppers and Seniors. A survey course designed to introduce the student to the complexity and diversity of psychological inquiry. Emphasis is placed on the application of basic psychological principles to individual experience in order to expand awareness of both self and others. In addition, the broader implications of psychological findings for an integrated understanding of human development and behavior are considered. Topics to be covered include: psychoanalytic, behavioral and humanistic theories of the person, psychosocial, cognitive and moral development, human motivation and personality, abnormal behavior and dreams. Lectures are designed to catalyze discussion. A combination of objective examinations and individualized writing assignments are utilized to evaluate the student's learning. (Dr. Marlowe)

33-1 Human Sexuality

- (7031) Two double class periods; for Uppers and Seniors. This course is designed to help students understand the facts of sexuality from the biological, social, psychological and spiritual points of view. While there is sometimes a tendency to separate mind from

body, the perspective of the course is that mind, body, soul and psyche are all involved in sexuality, often in complex and mysterious ways. In addition to the biological facts, topics to be covered include misconceptions and mythologies of sexual growth and development, masculine and feminine psychology, varieties of intimate relationships and variations in sexual life styles. There is a strong emphasis on discussion in class and self-reflection. In addition, the format of the course includes readings, films, case analysis, quizzes and a final paper.

40-3 Human Relationships (Not offered in 1983-84.)

One double period and two prepared class periods; for Uppers and Seniors. Pass/Fail. **Prerequisite:** one previous psychology course, or consent of instructor. The many dimensions of human relationships are explored. Emphasis is placed on assisting the student to articulate his or her emerging psychological awareness of personal and social relationships. Primary source readings and structured experiential exercises are used to develop an understanding of psychological concepts as rooted in individual experience. Topics to be considered include: core human conflicts, characteristics of the healthy individual in relationship to others, how power, body language and family communication styles shape relationships, and the impact of social structures on intimate relationships. This course, if failed, cannot be made up by examination. (Dr. Marlowe)

42-2 Group Theory and Process (Not offered in 1983-84.)

Two double class periods; for Uppers and Seniors. Pass/Fail. **Prerequisite:** one previous psychology course or consent of instructor. The topic for study in this course is human behavior in small groups. Human beings do most of their living, working and playing in small groups ranging in formality from family to classroom groups. The relationships among the members of these groups develop through similar stages and by common processes which determine to an important extent the effectiveness of the group in achieving its goal. These stages and processes are a response to two basic human needs: the need for belonging and community, on the one hand, and the need for separateness and individual identity, on the other. The classroom group provides students with a laboratory in which to experience and observe group process. Students read articles in the professional literature and write papers on topics that reflect upon their learning. This course, if failed, cannot be made up by examination.

Science

Since Andover students arrive with various levels of experience in science, there are courses offered in biology, chemistry and physics at several degrees of sophistication. The courses are arranged so that a single course may be taken in any of the three major fields at a level appropriate to the aptitude of the student, or several courses of increasing difficulty may be taken should some degree of specialization be desirable for certain students. There are also available introductory science courses (*Science 10-18*) for Lower and Juniors and some other specialized courses in geology, astronomy and energy (*Science 30-35*) for Uppers and Seniors.

In general, students are encouraged to take a variety of courses in physical and biological science and not to specialize in a single branch of science. For students with special interests, individual project work for credit is open to Seniors on a pass/fail basis and is arranged through the office of the Dean of Studies.

Although a single laboratory course in biology, chemistry or physics at the 20 level or above prepares the student for the College Board in that subject and meets the diploma requirement in science, students are encouraged to take more courses in science to broaden their base of scientific awareness and so as not to eliminate career options too early. Courses at the 50 level prepare students for the Advanced Placement examinations offered each spring by the College Entrance Examination Board.

Science 10-0 (8000) **Introductory Physical Science**
Four class periods. Open to Juniors with limited backgrounds in science. The course will deal with some of the basic concepts of physics and chemistry by means of classroom work, problem solving, and laboratory experiments.

Science 11-2 (8012) **Chemistry for the Biological Sciences**
Open to Juniors and Lower. Four prepared periods per week. This course is designed for students who have no background in chemistry and are planning to take *Biology 30*. Topics such as acid-base chemistry,

bonding, shapes of molecules, the mole concept, and elementary organic chemistry will be covered. There will be laboratory work.

Science 12-1 (8021) **Introduction to Geology**
Open to Juniors only. Four prepared class periods. Laboratory work is accomplished during class periods and involves study of three-dimensional aerial photographs, topographic maps, slides and various rock and mineral specimens. Some basic principles of chemistry are studied, as they apply to geological processes. Given in 1983-4 and in alternate years thereafter.

Science 14-1 **Introduction to Energy** (Not Offered in 1983-84.)

Open to Juniors only. Four prepared class periods. This course concentrates on hydroelectric, fossil, nuclear and solar energy, but there is some study of geothermal, wind, and house construction. Various basic principles from chemistry and physics are also studied as background for further work in the sciences. Students design and construct a model solar house and write one short paper. Given in alternate years.

Science 15-1 (8051) **Oceanography**
Four prepared class periods. This is an introductory science course designed primarily for Juniors and Lower who have not taken *Biology 25* or *30* or their equivalent. The 70% of our earth's surface comprising the oceans is examined from a number of physical, chemical, and biological perspectives. Accordingly, we investigate aspects of sea-water chemistry, mechanisms of wave propagation and current generation, and interactions among the thousands of living organisms found in or near the sea. Films and slides complement the classroom portion of the course.

Science 16-1 (8061) **Ecology**
Four prepared class periods. Open to Juniors and Lower Middlers. The course is designed to introduce students to the basic concepts of ecology. The material offered explores the meaning of interdependence and interrelationships within environment; population dynamics; trophic levels and energy; adaptation; succession; and the impact of man upon his environment and some of the problems caused by his use and abuse of basic resources. Class material is coordinated with and reinforced by laboratory studies of population growth, computer programs to study environmental problems and pertinent field trips. One of the major objectives of the course is to develop within the student an understanding of and sensitivity to the balance and beauty of nature.

Science Introduction to Zoology

- 17-1** Four prepared classes per week, one of which will be used for laboratory work. This is a one-term course designed for Juniors and Lower who have not taken *Biology 25* or *30* or their equivalent. A study will be made

of the similarities and differences among the major animal divisions from the most primitive invertebrates to the most complex vertebrates. Areas of concentration will include the basic systems of each phylum (*i.e.*, digestion and reproduction), as well as the ecological role and the evolutionary development of the organism. Lab periods will be used to develop techniques of dissection while studying the anatomy of animals from selected phyla.

Science Introduction to Observational Astronomy

- 18-3** Four prepared class periods, with one period each week used for observation. This course is intended for Juniors and Lower who

want to become familiar with the universe in which we live. Topics include a survey of the sky, lunar observation, the origin of the solar system, celestial distances and motions, and a brief introduction to stellar evolution. Students identify constellations, track planets, and learn how to observe using a telescope.

Science Energy and the Future

- 30-2** Four prepared class periods. Open to Uppers and Seniors who have either completed or are completing the science requirement,

but not open to students who have had *Science 14*. Its purpose is to study energy in a modern biological, geological, physical-chemical and social context. While several fundamental aspects of science and energy are inspected, time is devoted to issues that transcend mere technology. The course of study considers fossil fuels, nuclear, solar, geothermal, wind, tidal, and other sources of energy, biological and ecological aspects of energy, public health, risks, costs, governmental policies and programs. The intent is that through the unifying theme of Energy, students can grasp a broader understanding of their world, as well as perhaps a further glimpse into the present and future of man. A research paper is required.

Science Observational Astronomy

- 31-1** Four prepared class periods, with one period used for observation each week. This course is designed for Uppers and Seniors who are interested in a college level survey course in

modern astronomy from the earth to the stars. Topics include celestial measurements and coordinates, solar astronomy, planetary science, with particular emphasis on stellar evolution from gaseous nebula to

dwarfs, red giants, white dwarfs, neutron stars, and black holes. Observational projects involve the naked eye, binoculars, telescopes in Thornton Observatory and astrophotography. Not open to students who have had *Science 18*.

Science Cosmology

- 32-2** Four prepared class periods. This course is open to Uppers and Seniors. Cosmology is

the study of the universe as a whole, and its evolution. Topics include galactic structure and larger organization in the universe, modern theoretical models, physical evidence, the standard model of the Big Bang, galactic evolution, the search for extra-terrestrial life, and the future of the universe. Telescope observation, movies, guest lectures and a field trip augment the course.

Science Electronics

- 33-3** Four class periods per week. Prerequisite: previous completion of or concurrent enrollment in a Physics course, enrollment in at

least *Math 30*, and permission of the instructor. A course in modern solid state linear and digital electronics leading to a fundamental understanding of microcomputer hardware through consideration of circuit elements and their combinations, operational amplifiers, various types of diodes and transistors, integrated circuits, and Boolean algebra and its implementations. There will be considerable laboratory work.

Science Geology

- 34-3** Four prepared class periods, with two periods used each week for laboratory work. A

general introduction to physical geology, to include crystal growth, minerals, measurement of geologic time by radioactivity and fossils, volcanoes, seismology and earth structure, deformation of strata, faults, plate tectonics. Some attention to disasters of geological origin, *e.g.* earthquakes, tidal waves, eruptions. Students conduct a case study and construct a geologic map of an area in Colorado.

For another science-related course see Social Science 320 (Food and Hunger in Developing Countries).

Biology

The Biology department offers two year-long introductory level courses, each of which satisfies the diploma requirement for a laboratory science. Each course meets four times a week for 3 classroom periods and one double-period laboratory session which includes training in the use of the com

pound and stereoscopic microscopes and other laboratory equipment. Laboratory work requires careful observation, mastery of techniques and accurate recording and interpretation of results. Part of the spring term is set aside for work on individual or group laboratory projects. Juniors who wish to enroll in either *Biology 25—0* or *Biology 30—0* MUST obtain permission from the Department Chairman.

A student entering Phillips Academy as a Lower, Upper, or Senior who wishes to receive credit for and exemption on the strength of a course taken in the 9th grade at another school may do so upon passing a validation test to be administered after the student arrives at Andover.

25—0 Elementary Introduction to Biology

(8100) This course is intended primarily for Lower Middlers with little previous exposure to science. A topics approach usually centered around laboratory experiences is employed in order to acquaint students not only with fundamental biological principles but also with the methods and techniques used to elucidate them. Attention is paid to the processes by which scientific evidence is gathered, interpreted, and summarized. (This course is not open to Seniors.)

30—0 Introduction to Biology

(8110) This is a survey course for those students with previous exposure to some of the basic principles of science. It stresses the unity of life, rather than the diversity, by emphasizing the functions common to all living things. It covers, in plants, animals, and microorganisms, the fundamental principles of metabolism (including nutrition, gas exchange, materials transport, excretion, and homeostasis), responsiveness and coordination, reproduction and development, genetics, evolution and ecology.

The following four term-contained courses are designed for those students who would like to take biology beyond the 25 or 30 level. For those students who wish to take the Advanced Placement Examination, we recommend taking *Biology 41, 43, and 44*. (A year of Chemistry and/or Physics is also strongly recommended.) These courses, however, are not designed exclusively for students who wish to take the biology A.P. Exam. *Biology 25 or 30* or their equivalent is *required* for all 40-level Biology courses.

41—1 Evolution and Ecology

(8131) Three class periods and one double laboratory period. The major unifying theme in the study of biology is that all life has evolved from a common ancestor. This course will discuss the ideas of the pre-evolutionists, Darwin, and the neo-Darwinists. The mechanism of natural selection will then serve as a foundation for the discussion of the basic concepts of ecology such as the ecosystem, energy flow, succession, and relationships between populations. Problems of societal concern such as environmental ethics and our altering of our own evolution will also be discussed. A project or a research paper will be required.

42—1 Animal Behavior

(8141) Three class periods and one double laboratory period. The course is designed to familiarize the student with the basic principles of animal social behavior. The topics which receive the greatest emphasis are: territoriality, altruism, mating strategies, courtship, parental behavior, migration, dominance, and the evolution of behavior patterns. Throughout the course, an effort is made to relate the behavior of animals to the behavior of humans. A project or a research paper will be required.

43—2 Molecular Biology

(8152) Five prepared classes per week. Following a brief review of chemical principles, the course examines the major classes of biomolecules and how they are synthesized and degraded in the cell. Particular emphasis is placed on those reactions which are associated with energy conversion pathways such as respiration and photosynthesis. Enzyme function is considered both in terms of mechanisms of action and with regard to kinetics. The relationship between structure and function at the molecular level is emphasized in studies of the plasma membrane, gene interaction, and control of genetic expression.

44—1 Human Physiology

(8161) Five prepared classes per week. An in-depth consideration of the major systems of the human body. All lab work will be done during a two-week period, devoted solely to the dissection of a cat (or rabbit) and to microscopic slide study of the major tissues of the human body. A fully documented research paper will be required. Text: *The Mechanisms of Body Functions*, by Vander, Sherman & Luciano.

Chemistry

25—0 Elementary Introductory Chemistry

(8210) **Prerequisite:** Completion of *Mathematics 10* or the equivalent. For Lower Middlers and Upper Middlers. Three recitation periods and one double laboratory period. The course includes a systematic study of matter and the changes it undergoes. Emphasis is placed on the reasoning involved in the development of modern theory and general concepts rather than memorization of descriptive chemistry. Laboratory work is closely related to topics covered in recitation.

30—0 Introductory Chemistry

(8220) **Prerequisite:** Completion of *Mathematics 20* or the equivalent. Three recitation periods and one double laboratory period. The course is designed for students with more maturity and mathematical background than those taking *Chemistry 25*. As in that course, the modern theoretical framework of chemistry is emphasized, and the laboratory work is closely related to topics covered in recitation. These topics are treated in greater depth and with more emphasis on quantitative rather than qualitative answers.

41—1 Introduction to Chemistry

(8231) Three recitation periods and one double laboratory period. For Seniors who have not had a course in chemistry. This course covers the basic principles of chemistry—such as the periodic table, chemical bonding, acid-base chemistry, the pH scale, and simple chemical arithmetic. Emphasis is placed on examples from organic and biochemistry. In addition to the text there will be assigned articles from the "Scientific American." (Dr. Minné)

42—2 Research in Chemistry

(8242) **Prerequisite:** At least *Chemistry 25* or *Chemistry 30* completed with distinction, and permission of the instructor. One prepared period and three unprepared, double laboratory periods, or the equivalent. Each student selects a research project in consultation with the instructor and then carries out the necessary work. (Dr. Minné)

43—3 Elementary Organic Chemistry

(8253) **Prerequisite:** Completion of either *Chemistry 25* or *30*. Three recitation periods, and one double laboratory period. Students interested in medical or biological fields or in additional chemistry must generally wait until the college sophomore year before studying organic chemistry, the chemistry of carbon compounds. This course is a prior introduction to this critically important and fascinating subject.

Organic chemistry is largely non-mathematical and descriptive in nature. Students will use a condensed "minicourse" text, learn many of the laboratory techniques unique to organic chemistry, make use of three-dimensional plastic molecular models, and gain a sound background in nomenclature, functional groups, bonding, simple mechanisms, typical reactions, and infra-red spectra.

52—23 Advanced Placement Chemistry (T2) (a two-term commitment)

Prerequisites: *Chemistry 25* or *Chemistry 30* completed with distinction and a year of physics, which may be taken concurrently. Four recitation periods and one double laboratory period. The course is for students who wish to prepare for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

55—0 Honors Introductory Chemistry—Advanced Placement

Prerequisite: One year of physics. Three periods for recitation and two double laboratory periods. This course is open to a limited number of able students, by invitation, who have strong scholastic records in mathematics and physics. No prior course in chemistry is expected. It is essentially the equivalent of a first-year college course, and prepares students for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

Physics

20—0 Physics Honors for Juniors

(8300) Four prepared class periods. **Co-requisite:** Registration in *Math 19* or *Math 20*. This is an honors course for talented Juniors with a strong interest and background in science and mathematics. Students entering this course should have *mastered* a year of algebra as it is used profusely in solving word problems. There is laboratory work. Successful completion of this course prepares students for *Physics 55*. The text is *Physics* from the Physical Science Study Committee.

25—0 Physics

(8310) Five class periods, one unprepared. Open primarily to Lower Middlers. An introductory course in the basic concepts of physics. A less rigorous course than *Physics 30*, it is designed for students with latent mathematical maturity. Students should have completed one year of algebra before enrolling. Successful completion of the course prepares the student for the College Board Achievement Test in Physics.

30—1 College Physics

(8321) Five class periods. **Co-requisite:** Registration in at least *Mathematics 30* or its equivalent. A

non-calculus, B-level Advanced Placement physics course for students with ability in mathematics and science, this first term is a study of classical mechanics (including rotational dynamics and physical pendula), with extensive laboratory work and integral part of the course. *Physics 30—1* (or equivalent) is a prerequisite for *Physics 30—32* (T2). Text: *College Physics*, by Franklin Miller.

30—23 College Physics (T2) (a two-term commitment) (8325)

Prerequisite: *Physics 30—1*. Five class periods. Wave motion, heat, kinetic molecular theory, thermodynamics and electrostatics in Winter Term. Electrodynamics (including magnetism), geometrical and physical optics, early atomic and nuclear theory in the Spring Term.

52—12 Advanced Physics (T2) (a two-term commitment) (8374)

Five class periods. **Prerequisite:** An honor grade in *Physics 30* or its equivalent and enrollment in at least *Math 51* or its equivalent. This is a rigorous course in mechanics (fall term) and electro-statics and dynamics (winter term). Calculus will be used as required. This course generally prepares candidates for the C-level Advanced Placement Examination in Physics and entrance to honor level programs in physics at the university level. Text: *Physics*, by Resnick and Halliday.

55—0 Physics Honors

(8380) Four prepared class periods and one double laboratory period. Open to talented students

who will be enrolled in at least *Math 51*, may have taken a chemistry course and need not have taken any previous physics. If you are interested in this course, you may sign up for it with your academic advisor in the spring or you may request it on your course registration form. The department chairperson will then review your credentials and invite you to join the course or suggest you enroll in *Physics 30*. *Physics 55* prepares students for the C-level Advanced Placement Examination and is a rigorous course emphasizing mechanics and electro-statics and dynamics. Text: *Physics* by Resnick and Halliday.

60—3 Relativity and Quantum Mechanics

(8393) **Prerequisites:** *Physics 30* and *Math 52*. Four prepared class periods. Relativity and Quantum Mechanics are two theories that completely revolutionized man's thinking about the universe. The course

is a survey of the basic ideas underlying these theories. Special mathematical techniques needed for a better understanding of the material are developed in the course.

Theatre and Dance

All courses are electives, open to the various classes as noted. Courses in theatre are designed for students who wish formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work in productions. A variety of experiences is available: some courses result in performance; some courses study theory; some do both. Theatre students are encouraged, though not required, to supplement their class-work by participating in any of the numerous productions mounted each year, or they might be invited to join the Andover Touring Company, which has produced and toured with *Our Town*, *The Fantasticks*, *Scenes from American Life*, *A Thurber Carnival*, *Godspell*, *The Contrast*, *J.B.*, and *The Skin of Our Teeth*.

THEATRE COURSES

20—1 Introduction to Theatre

(6501) Four class periods. Open to Juniors and

20—2 Lower Middlers. Using both classical and

(6502) modern scripts to provide a range of dramat-

20—3 ic experiences, the class studies plays in

(6503) depth to see how they might proceed from

page to stage. The course examines the components of production, especially acting, set design, and lighting, to learn how the play moves from the script to full realization as a production. Intended for students with limited experience in educational theatre.

21—1 Introduction to Acting

(6511) Four class periods and one hour of move-

21—2 ment. Not open to Juniors. This course is de-

(6512) signed for students with little or no acting

21—3 experience. By doing exercises in movement

(6513) and voice production, reading, improvisa-

tion, and scenes, a student who is curious about the theatre may determine whether he or she has ability or interest in acting, while learning something of the process of characterization, the major responsibility of the actor. The emphasis is on the variety of acting ex-

periences rather than on a polished final product. One required trip to a nearby theatre. Text: Hagen, *Respect for Acting*.

22—1 Public Speaking

(6521) Four class periods. Not open to Juniors. The

22—2 course has a dual objective: to learn how to

(6522) speak easily in front of others, and to learn

22—3 how to speak English well. Students give

(6523) prepared and extemporaneous speeches on

a variety of topics while studying diction, pronunciation, projection, organization, and other techniques of good speaking.

26—23 Technical Theatre

(6562) Two double periods. Open to all classes.

(6563) Through practical experience in designing, building, and lighting for plays currently being produced, students learn the elements of stagecraft, including set construction, stage rigging, and the use of lighting instruments and gels. For the Winter Trimester emphasis will be on stagecraft; for the Spring, lighting.

28—1 Shakespearean Workshop

(6581) Four class periods. Open to all classes. An intensive study of several plays by Shakespeare, with the major emphasis on the spoken word. Close attention is given to pronunciation, diction, rhythm, dynamics, and interpretation. Students read aloud, act, memorize, and record scenes and soliloquies. Anyone who plans to audition for *Theatre 52—2* might consider this course.

32—2 Intermediate Acting

(6622) Four class periods. Prerequisite: *Theatre 21*,
32—3 or departmental permission. Building upon
(6623) the principles of acting introduced in *Theatre 21*, this intermediate acting course consists of detailed scene work and improvisation, exploring the relationship of the actor to his audience and to his fellow actors and focusing on the creation of dramatic moments, both with and without scripts. The course considers various acting styles, in an effort to guide the actor toward a greater understanding of his responsibility on stage: to see to what degree he can remove himself from himself while creating truthful characterizations.

51—1 Acting and Directing Workshop

(6711) Two double periods. Prerequisite: *Theatre 21* or 32, or departmental permission. Uppers and Seniors only. The course serves two kinds of students: those who wish as actors to study plays and characters in greater depth and those who wish to study the principles and techniques of directing, the most complex of theatrical tasks. While everyone will do some acting, only those people who express a desire to experiment with directing will do so. Class members work with manageable scenes from classical and contemporary periods, reading theories of acting and directing, studying various performance styles, and examining methods of scene interpretation.

52—23 Play Production

(6722) Four double periods. Uppers and Seniors
(6723) only. By audition. This course is oriented toward the performance of a significant work by an important playwright. Recent choices have been *The Crucible*, *The Sea Gull*, *The Little Foxes*, *Macbeth*, *As You Like It*, *The Hostage*, and *Hamlet*.

53—2 Playwriting

(6732) Four class periods. Open to Uppers and Seniors. Each student is expected to write at least one one-act play in addition to certain exercises in monologue, dialogue, and scene setting. The class reads aloud from students' work-in-progress while studying the formal elements in plays by important playwrights and by reading selected literary criticism focused on drama.

DANCE

25—123 Introduction to Dance

(6801) Four prepared class periods. Open to all
(6802) classes. A formal course in movement and
(6803) composition which introduces the serious student to the vocabulary and other elements of dance through active participation. The emphasis is not ultimately on public performance, but on the process and the discipline of modern dance. (Ms. Brecher)



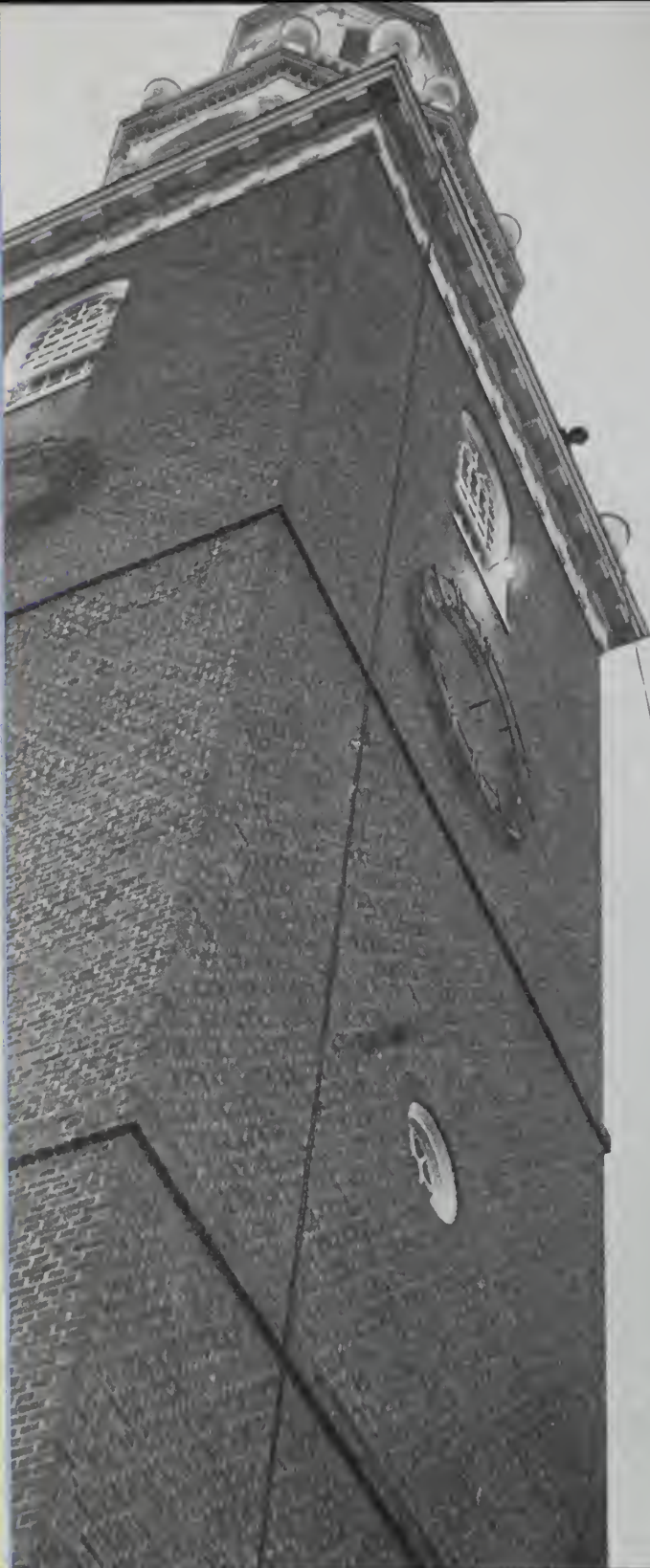
Phillips Academy
Andover, Massachusetts 01810

ANDOVER ACADEMY

Andover

Catalog 1984-85

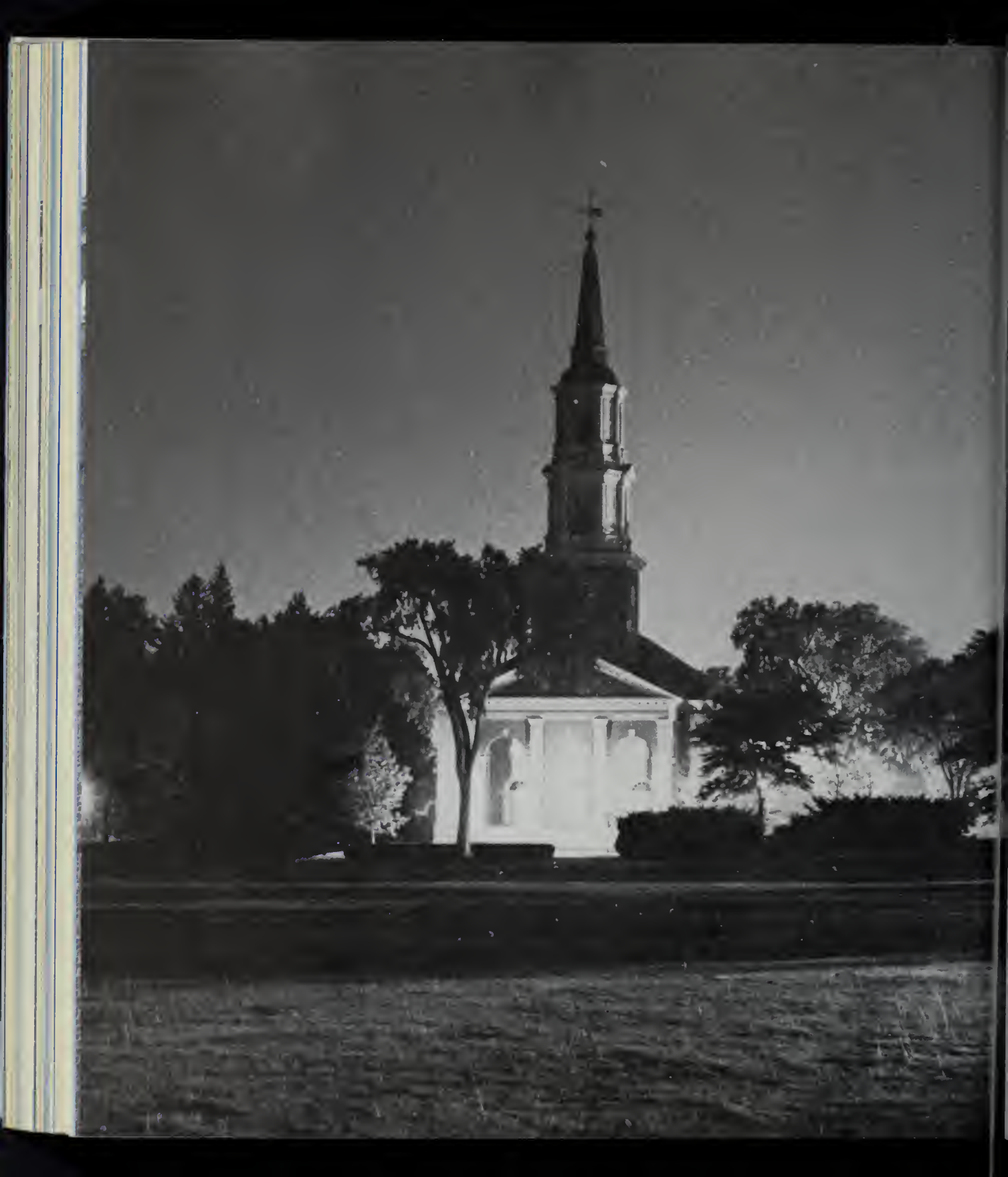


A black and white photograph of a tall, multi-story brick building, likely a school. The building has several windows, some with decorative elements. A person is seen rappelling down a rope that extends from the top of the building. The person is in a crouched position, holding the rope. The background is a clear sky.

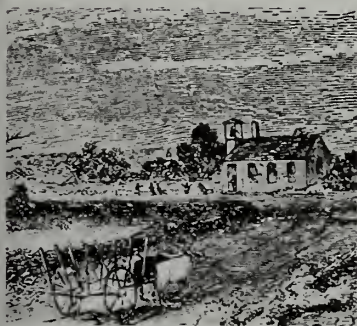
Phillips Academy,
Andover, Massachusetts,
better known as Andover,
is an independent,
coeducational, integrated
and non-sectarian
institution offering a
variety of academic
programs for high school
students.

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Introduction to Andover



Phillips Academy in 1778

In 1789 the first scholarship monies are recorded, from John Phillips, "in consideration of further promoting the virtuous and pious education of Youth, (poor children of genius and of serious disposition especially) in Phillips Academy, founded in Andover, Massachusetts."

When Phillips Academy opened in 1778, midway through the American Revolution, there was little reason to feel that the future held bright promise. The war with England was going badly. There was as yet no stable government for the new American nation, nor any surety that stability and social order would return after the revolution. Yet these very dangers convinced twenty-six-year-old Samuel Phillips, Jr. that just such a venture as the Phillips School was required to educate wise and pious leaders for the new nation. For, as he wrote: "Upon the sound education of children depend the comfort or grief of parents, the welfare or disorder of the community, the glory or ruin of the state." Young Phillips (who also was making gunpowder for Washington's army) convinced relatives and friends to put up money and land, and he drafted the Constitution for a school to train the minds and morals of youth for leadership and service. It was to be a sturdily democratic school, for the Founders set this mandate in the Constitution: "This Seminary shall be ever equally open to youth, of requisite qualifications, from every quarter." On April 30, 1778, thirteen pupils met Master Eliphalet Pearson in a refitted carpenter's shop on our Andover campus. Phillips Academy had begun.

Andover today has grown from thirteen boys to twelve hundred boys and girls, from one rude shed to a campus of many acres where extraordinary modern facilities mix with school buildings more than one hundred and fifty years old. Yet the educational values of Andover, even its governance, remain strikingly close to those set forth by the founders. The insistence on academic excellence and moral education, and a diverse student body drawn from able "youth from every quarter," are ideas as appropriate today as in the Revolutionary age in which they were conceived.

In 1973 neighboring Abbot Academy, (est. 1829), one of the nation's oldest and most distinguished girls' boarding schools, was merged with Phillips. After nearly two hundred and one hundred fifty years, respectively, of single-sex education, the two historically linked academies joined their adjacent campuses and educational strengths to effect a single coeduca-

tional academy. The gratifying success of the decade of coeducation, and during that time the Academy's 200th birthday celebration, have made Andover and its academic program known to an increasingly widespread public.

We serve some two thousand young people, most between fifteen and eighteen years of age, at the Academy during the course of a calendar year. Some twelve hundred students are at Andover during the traditional school term for periods up to four years. Over eight hundred more spend the summer with us in the Andover Summer Session or various programs and institutes under its umbrella. While the students in our day are drawn from a narrower age group than earlier — Eliphalet Pearson faced both a six-year-old and a thirty-year-old in his first class in April of 1778 — their hopes and worries, many of the decisions they face, even their pranks, are timeless.

It should be a privilege to attend Andover, but Andover should not be a school of privilege. We are committed to enrolling able students from all economic levels, from every racial, religious and ethnic entity, "from every quarter" of American life, and from foreign lands. Our *Constitution* bids us do this. Andover is no single group's sanctuary. In a day when many Americans, by their actions, are rejecting even the ideology of the melting pot, we assert it.

Andover is a residential school, a twenty-four-hour learning community. This allows us to draw young people from across neighborhood lines, across state and national boundaries. Young people learn from peers as much as from teachers, particularly in a setting where there is no disjuncture between classroom and street, between school and home. Class, racial, religious and geographic diversity enrich a school and bridge over the divisions that rend national and international life. We presume to forward the learning of leaders here, and leaders in our day must understand racial, social, national and religious differences, and see for themselves how significant is the unity in humanity.

Andover is well equipped to provide for students whose interests and abilities are primarily in the academic realm, in the traditional liberal curriculum. We believe that the core of this tradition is sound. When taught with high expectations and global perspective, this liberal arts core provides the basis for public and moral leadership.

In a school the principal means to achieve these ends are decent, free and talented teachers. Andover's teachers are strong personalities, individuals of energy and well-considered values, instructors whose work is in the classroom, and also on the playing field, in the dormitory, in the dining hall — in short, across the full range of places where both adult and young person meet. American education is moving

away from such a model of teacher. In the mistaken belief that "efficiency" will result, teaching is broken into mechanistic bits. Andover makes a stand for the other, older tradition, for whole teachers who are concerned about whole pupils, their struggles and joys, their bodies and souls as well as their brains.

The adolescent years are the crucial time for success in education, those years when young people learn much about themselves, establish their personal goals and visions for the future, and build the courage to lead, to march to the tune of a different drummer. Now we at schools are educating the leaders for the 21st century. We must help them achieve the habits of excellence, broad understanding and a commitment to service. Like the founders of this school, we take youth, and adolescent education, seriously. For as they wrote in our school Constitution more than two hundred years ago: "Youth is the important period, on the improvement or neglect of which depend the most important consequences to individuals themselves and the community." For the young people who join our Andover school community, we want it to be a challenging, constructive and joyful experience.





Andover Life

A Beginning



In 1782 Paul Revere was commissioned to make the Phillips Academy seal. Revere engraved the educational faith of Andover's founders — "The end depends upon the beginning" — around the symbols of the rising sun and the hive of industrious bees. The founders' religious and patriotic commitment to the common good is symbolized by the second motto, "Non sibi" — "not for one's self."

A Purpose

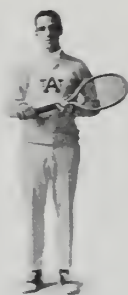
Phillips Academy opened for instruction shortly before the Continental Army marched out of Valley Forge and, in one sense, the school and the nation have grown up together. Paul Revere engraved Andover's seal; John Hancock signed its Act of Incorporation, and George Washington sent his nephews here to study. Samuel F. B. Morse and Oliver Wendell Holmes were students of Principal John Adams. Harriet Beecher Stowe lived and worked at Andover; she is buried in the Academy cemetery, and her home is now a dormitory. "America" was written on Andover Hill in 1832. For over two centuries we have sought to develop sound scholarship, character and self-reliance in our students, as well as a commitment to work for the good of the nation and mankind.

If you come to Andover today, you won't have to go far to see a building designed by Charles Bulfinch or one named for Nathan Hale. You will take classes in a modern arts and communications center, an archaeology museum and in buildings dating back to the War of 1812. You might live in a dormitory constructed in 1808 or one built in 1973. Your next door neighbor might be from Texas or the People's Republic of China. You might take Greek and advanced computer programming, or Russian and astronomy. You might learn how to play squash, discover what it's like to work for a radio station or how to run rapids in a kayak or canoe.

The opportunities are here.

The Phillips Academy faculty, meeting in the winter of 1979, adopted the following as a statement of goals and intentions:

Phillips Academy is committed to providing a rigorous academic education for qualified "youth from every quarter," as stipulated by our Constitution, and to helping students develop the skills and values necessary for personal fulfillment and a significant contribution to society. The Academy strives to meet this commitment in several ways: recruiting aggressively and welcoming qualified and prom-



Always speak to an Andover man on the street, whether you know him or not. All cheering is under the direction of the cheerleaders. Individual cheering is not allowed. New men are expected to have the songs and cheers perfectly learned by the end of the first two weeks. It is not good form to cut or mark school furniture. Try to keep enlarging the number of your acquaintances, but be slow to make intimate friends.

Selections from 1920's rule book, *Customs and Points for New Men*



ising students from a wide range of ethnic, economic, and geographic backgrounds, in the belief that diversity itself can be an enriching component of education; providing a strong curriculum in intellectual and artistic disciplines to cultivate a vision of man's potential as well as an understanding of his accomplishments, and to establish a basis for further exploration and perhaps eventual specialization; offering a diversified program in competitive athletics and physical education to foster physical agility, endurance, and resilience, as well as an appreciation of physical achievement and the notions of play and sportsmanship; developing a program in health to promote an understanding of and respect for physical and emotional well-being and to encourage sound health habits; encouraging the study and exercise of religious beliefs, as a means of spiritual nourishment; offering experiences in leadership within the community, in order to develop responsibility, resourcefulness, and social concern; and providing innovation and a measure of leadership in secondary education, a responsibility dictated by our combination of independence, resources, and tradition.

The Place

The school is located on a hilltop in the town of Andover, a 35-minute bus ride from Boston and Cambridge. It is well situated for easy access not only to the historical, cultural and entertainment offerings of the Greater Boston area, but to the beaches and mountains for which northern New England is justly renowned.

Phillips Academy was the first boarding school to be incorporated in the United States (1780). During its more than two centuries the school has grown in size from a single rude building and a few acres of land to an extended campus of 160 buildings on over 500 acres.



The People

Students

There are approximately twelve hundred students in Andover's regular session, about forty percent girls, sixty percent boys. Day students comprise about one-fifth of the enrollment. More than eight hundred others attend the various programs and institutes of the Academy's Summer Session.

Andover students come from every walk of life, from virtually every state in the union and from more than twenty foreign countries. They are divided into four classes: Seniors, Upper Middlers, Lower Middlers and Juniors — our traditional terms for 12th, 11th, 10th and 9th graders. Some are here for four years, most for a shorter time, but they all have two things in common: intelligence and the willingness to use it.

Faculty

The faculty number approximately two hundred; two-thirds hold advanced degrees at the master's level or higher. The power of an Andover education flows directly from their scholarship and classroom teaching.

Andover asks much of the men and women who teach here: although the heart of the work is in the classroom, tradition calls for the teacher to serve simultaneously as House Counselor or student advisor, coach and/or part-time administrator. Andover teachers are accessible to students in the dormitory, in athletic endeavors, in extracurricular activities; they share an abiding interest in the growth of young people and a willingness to become directly involved in that process.



A year, a week, a day

Andover operates on a trimester system, offering about 285 separate courses that vary in length from one trimester to the full year. The year begins in late September and ends in mid-June, with breaks at Thanksgiving, Christmas and in the early spring.

Classes are held on Monday, Tuesday, Thursday and Friday, the full class days, and on Wednesday morning and every other Saturday morning.

Wednesdays and Saturdays are half holidays with no afternoon academic appointments. On alternate Saturdays there usually are no morning classes and Sunday is totally free. This flexible weekly schedule provides time for independent study, for special projects, for informal sports, shopping in Andover or trips to Boston, the beach or the mountains. Social events during the week are limited by the demands of the academic program, but the weekend program on campus includes dances, concerts, movies, plays and informal activities.

Participation in athletics is required of all students, and athletics and activities are scheduled four afternoons a week for two hours each. On Wednesday and Saturday afternoons, varsity and junior varsity teams often participate in interscholastic competition.

Meals are served in Commons, our fifty-year-old central dining hall, composed of four handsome, traditional dining halls and two completely modern serving areas. The cost of meals is included in the fees of both boarding and day students.

The Daily Schedule

7:15 a.m.	Commons opens for breakfast
8:00 a.m.-	Five 50-minute morning Class Periods. A student is likely to have four morning classes, each meeting four or five times a week.
1:00 p.m.	
11:00 a.m.-	
1:30 p.m.	Lunch at Commons
1:45 p.m.-	
3:45 p.m.	Sports
4:10 p.m.-	Two afternoon Class Periods: most students have one afternoon class.
6:10 p.m.	
5:15 p.m.	Commons opens for supper.
6:45 p.m.	Evening activities: Chorus rehearsal, Drama Lab plays, club meetings, etc.
8:00 p.m.	Evening Study begins
10:00 p.m.	Students in own dorm

An individual student is likely to have one morning period and one afternoon period free each day, depending on course and laboratory schedule.

Most students are eligible to take a day excuse each week and, after the first two weeks of the year, overnight excuses beginning after their last scheduled weekly appointment.

Course work is intensive and involves about twenty-five hours of outside preparation each week. Required athletics or afternoon activities total approximately six hours each week. In addition, all students are required to participate in the school's work program, performing assigned tasks, supervision or leadership responsibilities two hours each week. Despite the amount of time that must be spent on academic pursuits, most students become very involved in extracurricular activities and social events. The school encourages independence and personal responsibility: there are study hours but no study halls, and decisions about the use of one's time are largely left to the judgment of the individual.





Residential Life



Dancing was forbidden in the 1820's, "and when a rash Frenchman proposed to start a dancing academy in the town, the Principal [John Adams] did his best to have him summarily ejected by the village fathers."

Claude M. Fuess, *An Old New England School*

Dorms and Clusters

Boarding students live in dormitories with faculty House Counselors and their families. Although these buildings vary in size and house from four to twenty-four students, all are small enough to encourage close relationships among students and between students and House Counselor. One-third of the students live in single rooms; two-thirds have one or two roommates. Rooming arrangements vary from large one-room doubles to three-room suites; large dorms are likely to have students from at least three classes.

For many students, dormitory life is one of the most valuable aspects of their time at Andover. Whether it's planning a pancake breakfast or studying for a history mid-term, sharing it with people from very different backgrounds or from foreign lands is a rewarding learning experience.

Dormitories are grouped into six geographical units called "Clusters," each including girls' and boys' dorms, about two hundred students from all classes, and twenty to thirty faculty families. Clusters create the personal atmosphere of a small community in which everyone knows everyone else and people do most or many things together. The Cluster System is the heart of Andover's residential life, bringing the advantages of a small school to an institution that already has the advantages of size.

The Clusters have considerable independence; teachers and students together manage their own affairs under the leadership of a Cluster Dean. Each Cluster has its own student officers, discipline system, intramural athletics and informal social activities.

A faculty member is responsible for administering the student work program, which is designed not only to develop a sense of community responsibility for the daily operation of the school, but also to help the school reduce its operating costs. Working two periods a week, students share the jobs of cleaning the dormitories, returning books to library stacks, serving as office helpers and laboratory assistants, and performing other essential tasks. In addition, all residents of a given dormitory are responsible for keeping its entries free of litter, snow and ice.

The Clusters take turns each week working in the dining hall, Seniors serving as overseers. Seniors have many other supervisory roles, including Cluster and School offices, editorial boards of student publications, Club leadership, and other assignments serving the Phillips Academy community.



Counseling and Discipline

Those who are not accustomed to a residential school may at first be surprised by the degree of independence an Andover student has; on the other hand, they may be surprised by the existence of rules and procedures necessary to protect the rights of individuals and to enable the school to achieve its ends. Existing rules have a dual purpose: to preserve the necessary order in the community so that effective learning can take place, and to teach students that individual freedom can be achieved only through due consideration for others. The school tries to keep rules to a minimum. Incoming students and their parents are provided with a copy of the *Academy Blue Book*, summarizing rules and regulations; all students are held responsible for its contents.

Each student has a faculty House Counselor living in the dormitory's faculty apartment and available for advice and assistance. This is the faculty member most directly responsible for the students in a dormitory, working with them on both a personal and academic level. Parents can expect to hear from the Counselor at regular intervals and are encouraged to turn to this faculty member for information about a student's progress.



Each Cluster Dean supplements the work of the House Counselor and is available to students and parents for information and advice. Other support staff include academic advisors, who help students in the Cluster plan their academic programs, and the College Counseling Office, which assists all Seniors with their future educational plans.

Graham House serves the community in several ways. The staff offers psychological counseling, study counseling, study skills courses, student tutorial services, the Psychology Department curriculum, consultation to faculty and staff, and specialized workshops in response to residential needs.

Discipline is handled at the Cluster level and involves the Cluster Dean, House Counselor, other faculty and student representatives. Offenses involving a student's integrity, social offenses that threaten the well-being of other individuals or the school community, and continued infractions that indicate an unwillingness to come to terms with the demands of the school — all render a student liable to dismissal. Cluster recommendations for suspension or dismissal are made to the Headmaster, who makes the final decision. Examples are dishonesty, the possession or use of alcoholic beverages or illegal drugs and unauthorized absence from school bounds. Students may not possess, rent or drive any motor vehicle within school bounds; bicycles are permitted. Andover does not allow smoking, unless students have completed a school-administered course on the health hazards involved and have parental permission.

In a community such as Andover, all must commit themselves to the goals of the community and to loyalty to each other. Since education at Phillips Academy is both intellectual and humane, students and faculty derive mutual support from sharing of themselves and their ideals.

Trust and responsibility have many interpretations; these words have become hackneyed from overuse and misunderstanding. But the ideas they embody — sensitivity to others, willingness to explore and respect differing points of view, charity and humility in expressing judgment, readiness to cherish friendship, to depend and to be depended upon — are nonetheless fundamental. Such values can scarcely be legislated and can only be imperfectly defined. Yet the health and happiness of everyone in the community depend on consideration and awareness, restraint and candor, discretion and shared joy. Collaboration toward these imprecise but worthwhile ends is an expectation which all at the Academy hold.

Only boys and girls who feel that they can live happily with the rules and guidelines of Phillips Academy should apply for admission.



In the early 1930's Abbot alumnae parents tried to persuade Principal Bertha Bailey to abandon the required long black stockings worn with the girls' gym bloomers. To this request she steadfastly refused: "I don't like legs."



Harriet Beecher Stowe, author of *Uncle Tom's Cabin*, and her husband, a Seminary professor, lived in Stowe House. She is buried in the school cemetery. Mrs. Stowe shocked the strict Congregationalist community by giving parties and entertainments for students, was suspected of going to the theater and even of having "Episcopalian leanings." Claude M. Fuess, *An Old New England School*

The Campus Ministry

Reflective of a diverse student body, the religious ministry at Phillips Academy is also diverse. Priest, minister, and rabbi serve the ongoing liturgical and celebrative needs of the Roman Catholic, Protestant, and Jewish students on campus; the chaplains also teach, counsel, and help organize a variety of community service and social action projects for the entire campus. To meet the needs of students from other spiritual traditions, opportunities are provided for reflection, meditation, and fellowship in a variety of settings.

Activities

Extracurricular activities are an important aspect of a student's education, and Andover offers a rich fare, thanks to the diversity of interests in the student body. From the Pre-Med Club member to the Model Railroader, it seems that all Andover students do something special in their free time.

Many of the activities are service-oriented; the Community Service Program places student volunteers in area nursing homes, elementary schools, youth centers and other agencies. Closer to home, the Tour Guide Association handles the responsibility of conducting campus tours for the Admissions Office. Older students who are members of the Tutorial Program offer help to fellow students in academic difficulty. The student radio station, WPAA (91.7 on your FM dial), is on the air from 6:30 a.m. to 11:30 p.m. daily, serving the local listening area as well as the student body. *The Phillipian*, the Academy's prizewinning student-run weekly newspaper, is wholly uncensored; students lay out the paper and do their own typesetting, as well as write the articles and headlines. The *Pot Pourri*, the school yearbook, and the school literary magazine, *The Mirror* (Robert Frost was an early contributor), provide more opportunities for those with a literary bent.

Cultural organizations include the Afro-Latino-American Society, the Asian Cultural Society and others; course-related groups range from the Astronomy Club to the Russian Club. The Chapel Council, the Newman Club and the Jewish Student Union support the ecumenical ministry in providing active religious communities for Andover students.

At any time during the week, actors and directors will be working on a main stage play or on a student production in the Drama Lab; the Andover Student Political Union may be listening to a State Department official discuss the Middle East; the Natural History Club may be birdwatching on an

ocean beach or — if the season is right — the Ski Club may be on its way to the White Mountains of New Hampshire.

Many students make extensive use of school facilities in their free time, whether or not they are affiliated with a club or organization. The Arts Center is a major focus of school life — darkrooms are used almost around the clock, and students and faculty interested in painting, metal sculpture, ceramics or design make use of the center's studios and workshops in their free time. The Music Department also provides facilities for students interested in pursuing music beyond the classroom.

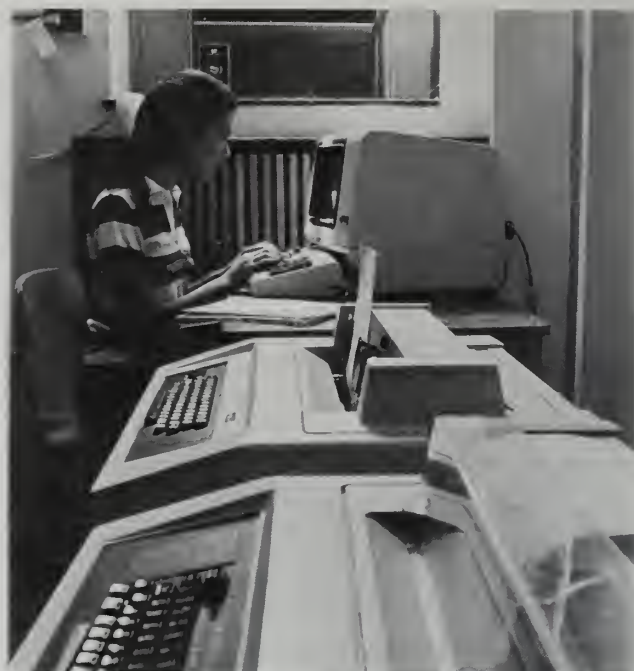
There is no limit to the variety of extracurricular activities at Andover. Students who do not find an existing club or organization that meets their needs are encouraged to start one.

Undergraduate Organizations (Clubs)

Academy Symphony Orchestra
 Afro-Latino-American Society
 Andover Student Political Union
 Astronomy Club
 Athletic Advisory Board
 Backgammon Club
 Band
 Blue Key Society
 Brass Ensemble
 Bureau of Tutoring
 Cantata Singers
Caucus (Af-Lat-Am publication)
 Chamber Music Society
 Chamber Orchestra
 Chapel Council
 Cheerleaders
 Chess Club
 Chorus
 Coin Club
 Day Student Union
 Drama Workshop
 Dungeon and Dragon Society
 Eagle Scout Post 107
 EAT (Environmental Action Team)
Eidolons (student photography publication)

Fidelio (madrigal singing society)
 French Club
 German Club
 Health Food Club
 International Asian Society
 Jazz Band
 Jewish Student Union
 Junior Achievement Club
 Mass. General Hospital Intern Exchange
 Micro Computer Club
The Mirror (literary magazine)
 Model Airplane Club
 Model Railroad Club
 Muse
 Natural History Club
 Nuclear Awareness Education Group
 Newman Club
 Orchestra
 Outing Club
The Phillipian (independent weekly student newspaper)
 Philomathean Society (debating society)
Pot Pourri (yearbook)
 Pre-Law Society
 Pre-Medical Society

Press Club
 Psychology Club
 Radio Broadcast Association (WPAA-FM)
 Russian Club
 Sailing Club
 Ski Club
 Social Functions Committee
 Spanish Club
 Stage Crew
 Stamp Club
 Student Guides
 SUMOP (Summer Job Opportunities)
 Table Tennis Association
 United Nations Club
 War Games Club
 Western Union
 Women Students' Union
 Young Democrats





Educational Resources

The Oliver Wendell Holmes Library

At the center of Andover's intellectual life is the 102,000-volume Oliver Wendell Holmes Library, named after the famous doctor and poet who was a member of the Class of 1825. The stacks are open to students. In addition to academic work, students and teachers use the library to explore new fields of interest and to read casually.

The library subscribes to over 260 American and foreign periodicals and daily papers from cities throughout the country. A microfilm file of *The New York Times* is available. Particular library treasures are the Jansson Atlas, printed in Amsterdam in 1657, papers and books of Oliver Wendell Holmes, and one of the world's leading collections of Vergiliana.

The Addison Gallery

The Addison Gallery of American Art operates both as a museum in the traditional sense and as an art center for the school and the community. In addition to organizing exhibits of American art from the collection, the museum staff originates exhibits of contemporary painting, sculpture, photography, video, film and crafts. Seminars bring artists in close contact with students to discuss contemporary art issues. In cooperation with Phillips Academy's Music Department, concerts by faculty and students are produced in the museum.

The holdings of the museum are recognized as a distinguished specialized collection: Allston, Copley, Morse, Stuart, West and others represent the Colonial period. Of special importance among the many paintings of the nineteenth century are examples by Cole, Doughty, Eakins, Homer, Inness, LeFarge, Ryder, Twachtman and Whistler. The early part of the present century is shown in the work of Bellows, Davies, Demuth, Hassam, Hopper, Luks, Marin, Prendergast and Sloan. Contemporary artists are represented by works of Calder, Lippold, Moholy-Nagy, Hofmann, O'Keeffe, Pollack, Shahn, Wyeth and others.



Respect Artem Patriae

"Respect the art of your country", was the admonition of Thomas Cochran, founder of the Addison Gallery of American Art 51 years ago, before New York was an international art center and when a museum dedicated to American art was still a novelty. Founded in the hope that "if Andover students could be surrounded by beautiful things, their lives would be immeasurably enriched", the gallery and its collections have fulfilled this vision.



The Robert S. Peabody Archaeology Museum

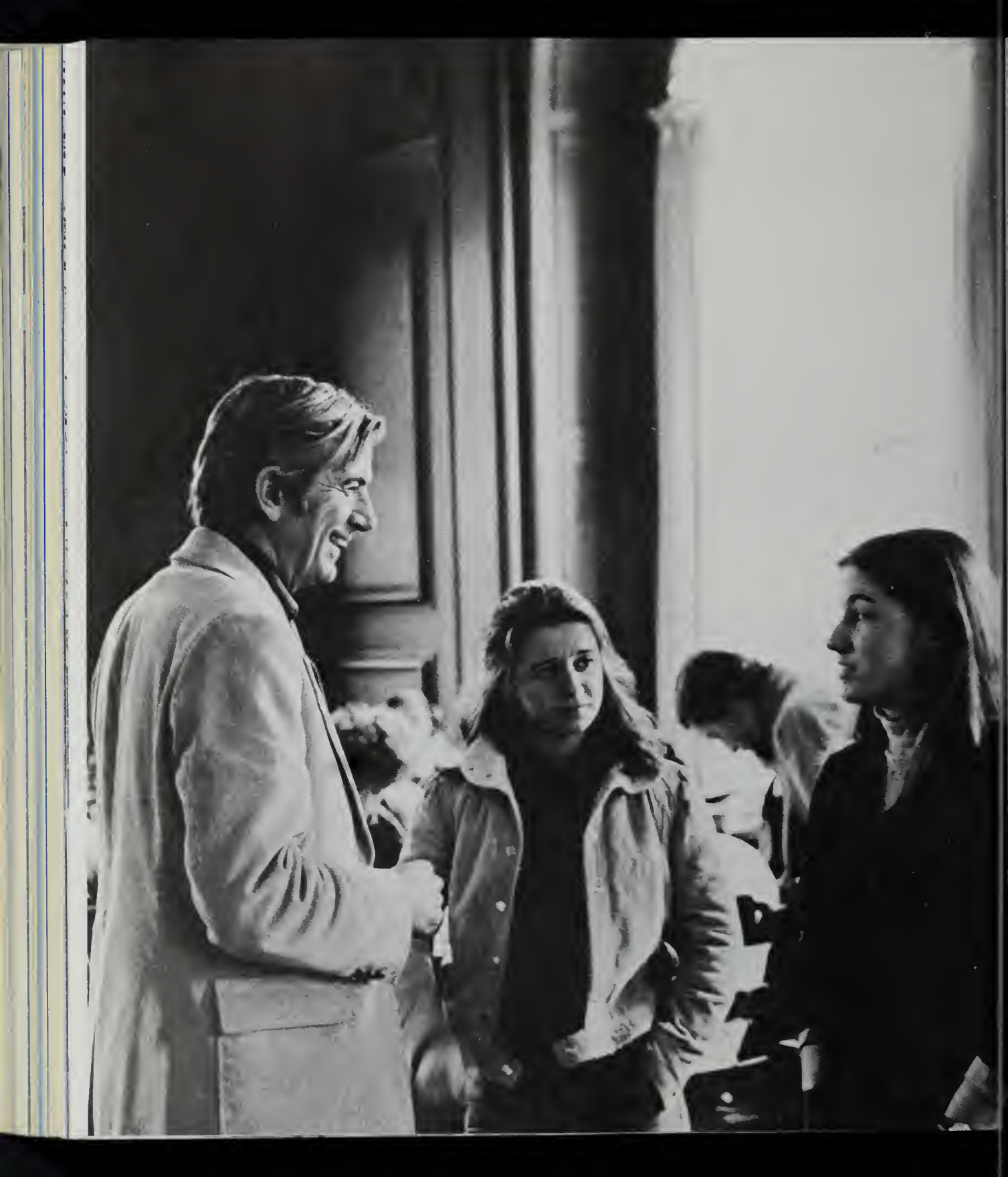
The Robert S. Peabody Foundation for Archaeology has conducted major archaeological research in this hemisphere for the last seventy-five years and has published many reports of its scientific investigations. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas. The laboratories of the museum are used in teaching and illustrating the Foundation's research. Mature students may undertake special study projects which involve the use of the Foundation's collections and library resources.

Current research is concerned with the origins of agriculture and with the concomitant rise of civilization in the New World.

The Cochran Sanctuary

The Moncrieff Cochran Sanctuary is a sixty-five-acre tract of rare beauty located so close to the center of school activity that it is in fact an extension of the campus. Landscaped areas planted with dogwood, azalea, rhododendron and laurel provide a succession of bloom that draws many visitors from late April to mid-June. A brook and two ponds attract nesting ducks and geese, and extensive natural wild areas, varied in terrain and plant life, provide nesting places for many species of land birds. Cross-country runners and skiers make extensive use of the Sanctuary, as does the Academy's Search and Rescue program.





The Academic Departments

The Curriculum

The curriculum of Phillips Academy contains both a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical. All departments offer courses beyond the level of preparation for college.

Classroom groups are small enough to permit individual attention; the average class size is fourteen. Students are placed in sections fitted to their attainment and, through accelerated sequences and advanced courses, are encouraged to progress at a rate commensurate with their ability and ambition. Many students fulfill requirements ahead of the normal year, increasing their choice of college-level courses and other elective opportunities. Andover's trimester system provides flexibility and variety in the curriculum and allows various combinations of independent work and off-campus projects.

Every student is assigned to an academic advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements and the student's particular interests. With the approval of the academic advisors and House Counselors, students may select their instructors and sections. However, the school cannot guarantee that all students will be able to have their desired selections.

The curriculum and diploma requirements are described in detail in the *Course of Study*, which will be sent upon request to each preliminary applicant and to others who would like to receive it.

THE ARTS



During his second and third years at Andover, Jack Lemmon's grades were suffering due to his overpreoccupation with theatrics and composing. Though things looked very bleak in his senior year, he applied himself diligently and made what he thought was an astounding reversal. Against all odds he was able to graduate. When Headmaster Claude Fuess handed the proud young Lemmon his diploma, he said, "A remarkable change. I'm truly impressed, Bill."

Visual Arts

At the heart of the art program is a concern that all students learn to see freshly and accurately, that they learn how to organize their efforts to make something happen, that they develop a critical eye for the coherence of their environment, all these with an independent mind.

The diploma requirement in art is as follows: Juniors and new Lower Middlers must take a trimester course in studio art; an entering Upper Middler must take a trimester course in studio art or music. Andover attempts to balance structured, problem-solving courses like the basic Visual Studies, with more adventurous advanced courses, organized around longer-term projects. For a student who desires several terms in art or design, the courses are here, whether the student's objective is a professional school, Advanced Placement in a liberal arts college, or simply a strong basis in a traditional area of general education.

The superb facilities of the Arts and Communications Center — fully equipped wood and metal shops, two complete photo labs, print-making equipment, painting and drawing studios, a kinetics studio — are supplemented by the several kilns available to ceramicists. The department welcomes extracurricular use as well as work related to courses, and faculty members are on hand every evening to encourage the idea that whether it's painting or bicycle repair, the Arts Center is the place to go.

Theatre and Dance

Courses in theatre are designed for students who seek formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work on plays. A variety of experience is available; some courses are performance oriented; some are theory oriented; some are both. All combine classroom and workshop sessions; students work out practical theatrical problems together under the guidance of an instructor. Drama, as well as dance, both modern and ballet, may be elected as an alternative to athletics, once a year.

George Washington Hall, capable of handling audiences of one thousand, includes a flexible,



professionally equipped proscenium stage. It has a full fly system, accommodation for numerous lighting instruments and an elevator/pit. Recent main stage productions have included *The Me Nobody Knows*, *Cabaret*, *The Time of Your Life*, *Twelfth Night*, *Macbeth*, *Our Town*, and *Camelot*.

The Drama Lab, also in George Washington Hall, is a "black box" — an intricate arena/workshop with excellent lighting facilities, suitable for audiences of not more than seventy-five. Although main stage plays are usually directed by a member of the faculty, the Drama Lab allows students to direct plays themselves and to experiment with dramatic styles. A sample of productions from recent years includes plays by Albee, Ionesco, and Pinter but original student work is also performed here.

Theatre students are encouraged — but not required — to supplement their classwork by participating in any of the numerous productions mounted each year; anyone may audition for the Andover Touring Company, touring with such plays as *Our Town*, *The Fantasticks*, *Scenes from American Life* and *Godspell* during spring vacation.

Music

The Music Department faculty consists of five full-time and several part-time instructors. Other highly qualified instrumentalists are available to teach voice, piano, organ, classical guitar, brass, percussion, strings, and woodwinds.

Andover offers courses for the beginner as well as for intermediate and advanced students both at the applied level (study of musical instruments or playing in a musical organization) and in the history, appreciation, and theory of music. An entering student who has not had the opportunity to learn to play may join a class to study an orchestral instrument. He or she may also, for a nominal fee, study privately.

The Nature of Music, or Music 20, is the diploma requirement in music, and a prerequisite for most courses in the history, appreciation, and theory sections. A more advanced three-part course, Theory of Music, runs in sequence throughout the year.

Graves Hall, the department's newly renovated home, has large rehearsal halls for the Concert

Graves Hall, the department's newly renovated home, has large rehearsal halls for the Concert Band and the Academy Orchestra, many individual practice and ensemble rooms, music classrooms, teaching studios and an electronic music studio. The department also has a large, up-to-date record library and listening room. The Chorus has a fully equipped rehearsal room and a library of music literature in the Cochran Chapel, a short distance away. The Chapel also houses two new Andover organs for the use of beginning and advanced organ students. One is located in Kemper Chapel; the other, in the main chapel, is a 30-stop, double manual, tracker action instrument.



VISUAL ARTS

Introductory Studio Courses

Visual Studies
Visual Studies for Juniors
Introductory Design
Introductory Ceramics
Introductory Photography

Intermediate Studio Courses

Visual Studies (Art 10) is a pre-requisite for all intermediate courses.

Drawing
Animation
Drawing and Two-Dimensional Design

Two-Dimensional Design
Three-Dimensional Design
Intermediate Photography

Advanced Studio Courses

Visual Studies (Art 10) is a pre-requisite for all advanced courses.

Graphics and Photography
Studio Photography
Painting
Filmmaking
Advanced Ceramics
Printmaking
Advanced Photography

Sculpture

Photo Illustration
Large Format Photography
Photo Journalism
Kinetics
Architecture
Contemporary Communications
Calligraphy: The Art of Lettering by Hand
Advanced Placement in Studio Art
History of Art: Painting and Sculpture
History of Art: Architecture

MUSIC

Applied
Beginning Instruments
Recorder Ensemble
Brass Ensemble
Woodwind Ensemble
String Ensemble
Fidelio Society
Band
Chorus
Chamber Orchestra
Private Instrumental and Vocal Lessons
The Nature of Music
Developing Musical Skills

History and Appreciation

Independent Study in the History and Literature of Music
Jazz
Popular Music in America

Theory

Orchestration and Conducting
Theory of Music I
Theory of Music II
Theory of Music III
Electronic Music
Advanced Techniques in Electronic Music

THEATRE AND DANCE

Theatre

Introduction to Acting
Public Speaking
Acting and Directing Workshop
Stagecraft
Play Production
Shakespearean Workshop
Playwriting

Dance

Introduction to Dance

CLASSICS

Latin and Greek — still? Yes, as futuristic nightmares and present turmoils are reawakening a search for order, perspective and ideals in the human experience, names like Plato, Vergil, the Parthenon and the *pax Romana* not only symbolize great milestones in that search but also suggest the habits of mind that produce enduring greatness — the same habits of mind that show up so clearly in a sentence, paragraph or entire work of Latin or Greek literature.

The chief aim of the Classics Department is to help students rediscover this sense of order and ideals, in the hope that they may apply it, in turn, to the challenges they face today. Many recognize this by choosing Latin or Greek as the foreign language in which to fulfill the diploma requirement. Others elect one or both as second or even third languages. Still others opt for elective survey courses in various aspects of Classical civilization, as listed below, or, by special arrangement, for independent projects in reading or research.

CLASSICS

Greek

First Year: basics of language and culture

Accelerated First Year: two years in one
Introduction to Greek Language and Culture
(one term)

Second Year: Xenophon, Plato, New Testament

Third Year: Homer, Euripides

Fourth Year: Sophocles, lyric poets, Thucydides

Latin

First Year: basics of language and culture

Accelerated First Year: two years in one
Introduction to Latin Language and Culture
(one term)

Second Year: Caesar, Livy, Plautus

Third Year: Cicero, Sallust, Vergil

Fourth Year: Vergil's *Aeneid*

Fifth Year: Horace, Catullus, Livy, Tacitus

Greek Civilization

Roman Civilization

Etymology

Ancient History

Classical Mythology

Survey of Greek Literature

Survey of Roman Literature

ENGLISH

Convinced that level of achievement is more important than the number of years a subject is studied, the English Department has established modest but firm diploma requirements. A student must prove himself competent in writing and reading through the English Competence course and, by taking the Literature Sequence, acquire a sense of the depth and breadth of his literary heritage. For students who enter in the 9th grade, English 10: The Journey, which is a preparation for the Literature Sequence, is also required.

Once the student has successfully completed that Literature Sequence, which normally takes a year and offers several options, opportunities multiply. Students may enroll in any of the Literature Sequence courses that they have not yet taken; they may study any of the more than twenty advanced or specialized courses offered by the department; Seniors may qualify for an independent project supervised by the teacher of their choice.



The walls that used to separate academic departments are crumbling. A number of the courses in Theatre are taught by members of the English Department. Most of the interdisciplinary courses are related to English studies. A course in English etymology is taught by the Classics Department. Several of the foreign language departments offer courses about their literature in English translation, but the fundamental requirement does not change. Every student who graduates from Andover has either passed the Competence course in the basic skills of writing and reading or English 300.

ENGLISH

Introductory Courses

English 300 (for Seniors and Postgraduates)

Required Sequence Courses

English Competence (three terms)

Lit B, The Comic View, The Tragic View, The Mythic View (two terms)

Lit C, Shakespeare (one term)

Elective Courses

(Only courses with sufficient enrollment will be given.)

Irish Studies

American Writers

Introduction to Writing

Hemingway and Fitzgerald

Afro-American Literature

James Joyce

Man and God

Forms of Literary Imagination

Modern Playwrights

Shakespeare: The Man, The

Times, The Theatre, The Plays

Satire and Comedy

Novel and Drama Seminar

Creative Writing

The American Novel

Milton and Spenser

Chaucer and His Age

Wit and Poetry in the

Seventeenth Century

Images of Women



Graceful Bulfinch Hall (1819) has been in Academy use for more than 150 years as a recitation hall, gymnasium, and dining hall and now houses Andover's English classes. Dr. Oliver Wendell Holmes, Class of 1825, immortalized "the classic hall" in his poem, "The School-boy," written over 100 years ago for the Academy's Centennial Celebration.

HISTORY AND THE SOCIAL SCIENCES

The courses in History and the Social Sciences cover a broad spectrum of human experience: from the Vietnam War to ancient Athens, from the modern American Presidency to primitive cultures, from Medieval History to Nuclear Weapons. They range in teaching techniques from drill in close reading, note-taking and testing to individual projects, written or oral, conceived by students. All are based on the conviction that a citizenry that is informed about man's experience, both past and present, is essential to a democratic society.

No course in the department relies on a single textbook. Students work with paperbacks, books on reserve in the library, mimeographed handouts, movies, and slides. All courses emphasize, not only the subject matter studied, but also the acquisition of basic historical skills that should serve the student well throughout the remainder of his life.

The courses for Juniors focus on the concept of Continuity and Change, have a global focus, use a multi-disciplinary approach, and include one day a week on contemporary affairs. In the Lower Middle year there are courses in American, European, and Asian biographies. These courses emphasize study skills basic to the study of history. The department believes that the study of great men and women holds a special interest for this age group and reinforces the significance of the individual's role in history. These courses prepare students for the required course in United States History in the Upper Middle or Senior year and for other upper-level history courses.

The diploma requirement for History and the Social Sciences is successful completion of United States History plus one trimester elective in an upper level non-United States History, or in history prior to the settlement of the Americas, or in a social science course. There are also advanced seminars in various subjects in American Civilization for Seniors who have completed the diploma requirements. In United States History and in several upper level electives, the department requires students to choose topics for extensive

papers; and encourages them to use the raw materials of history — newspapers, letters, diaries, interviews. Qualified Uppers and Seniors may spend the spring term in Washington, working as interns in Congressional offices.

HISTORY AND THE SOCIAL SCIENCES

Social Science

Introduction to Economics
The Modern American Presidency
American Race Relations
Urban Studies Institute
International Relations: The Present Patterns
Men, Women and American Culture
Nuclear Weapons - Proliferation and Responses

History

Continuity and Change: An Introduction
Continuity and Change: The Pre-Modern World
Continuity and Change: The Modern World
American Biography
European Biography
The United States
American History for Foreign Students
Ancient History
Social History of the Middle Ages
Modern Europe: A Survey
The Soviet Union
Modern Russia: History and Literature
Tudor England
Victorian England
International Relations: The Present Patterns
Modern Japan
Modern China
The Middle East
Africa and the World
Latin American Studies
Families in America
The 20th Century Constitution, the Courts, and Individual Rights
American Urban History
History and Mathematics
Topics in the History of Phillips Academy and Abbot Academy



MATHEMATICS

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late twentieth century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his or her energies and curiosity to the organization of mathematical knowledge.

The mathematics curriculum is built around a core sequence of eight trimester courses, three of elementary algebra, two of geometry, one of intermediate algebra, and three of precalculus topics, completion of which will satisfy the diploma requirements. An additional trimester is usually required before entering calculus. Students whose previous course was elementary algebra will take *Geometry* unless our placement test indicates a need for one term of *Algebra Review* first. Those who enter with one year of algebra and one year of geometry will satisfy our diploma requirements by taking intermediate algebra and the first two precalculus trimesters unless the placement test shows a need for *Algebra Consolidation* first. The

latter course prepares the students to take the precalculus courses the following year. There are a variety of special courses designed for new students who fall between the above criteria.

The department also offers many elective, term-contained and year-long courses, descriptions of which may be found in the *Course of Study*. Over one-third of all mathematics is taken electively, much of it in preparation for the Advanced Placement Examination. These courses include the study of limits and sequences, elementary and advanced calculus, analytic geometry, differential equations, probability statistics, computer science, linear algebra and vector analysis.

The Mathematics Department is located in Morse Hall, which also houses three computer rooms. One room has 11 timesharing terminals connected to the DEC mini-computer system. The other two rooms have microcomputers; one with 9 IBM Personal Computers and the other with 7 Apple computers and 1 Radio Shack computer. A variety of computer courses are offered that range from an introduction to computers to preparation for the Advanced Placement test in Computer Science. Computer languages taught include APL, LOGO, BASIC and Pascal.



The community of students who like math at Andover is sizeable. They share their curiosity and knowledge by offering to tutor other students at the school, and by participating in interscholastic competition under the aegis of the Math and Computer Clubs.

MATHEMATICS

*Courses leading to satisfaction
of the diploma requirement*

Elementary Algebra
Algebra Review
Geometry
Algebra Consolidation
Intermediate Algebra
Precalculus
Elementary Functions

Elective Courses

Calculus
Computer Programming: beginning,
intermediate and advanced
Infinite Series and Differential
Equations
Linear Algebra and Vector
Calculus
Mechanical Drawing
Navigation
Probability
Statistics

MODERN FOREIGN LANGUAGES

As long ago as 200 B.C. the Latin poet Ennius used to say that because he knew three languages he had three hearts. Andover can render no finer service to today's world than to send forth its alumni with many hearts, ready and able to feel for, to understand, and to respond to the millions of people who speak languages other than English.

Acknowledging the importance of foreign languages, Andover requires for the diploma three years of an ancient or modern language. (For Greek and Latin, see Classics.) The modern foreign languages offered are Chinese, French, German, Italian, Russian and Spanish. Emphasis is on the spoken word, and the foreign language is the basis for all communication in the classroom. Small classes make possible maximum participation, with supplementary practice provided by our versatile language laboratory. There are opportunities to join accelerated classes which complete, for example, the work of four years in three.

At the 4th-, 5th- and 6th-year levels the study of literature may be supplemented by courses in the

art, history, geography and music of the foreign country. In upper-level courses students can prepare for Advanced Placement Examinations in language and literature and qualify for advanced courses when they enroll in a college. Superior students may carry out independent projects, including apprentice teaching, under careful guidance.

At all levels of study progress in the foreign language is facilitated, and the resources of the classroom are expanded, through occasional use of communication media (periodicals, radio, etc.) and such activities as the staging of plays, the use of the school's radio station for broadcasts in foreign languages, festivals, language tables in the dining room, movies, clubs, visits by performing groups, and trips to language events in Boston and at nearby schools and universities. Students are urged to consider opportunities, sponsored by Andover or by other schools, to live and study abroad.

For Andover's School Year Abroad program, see page 44.

Chinese

In response to the importance of China and its language, and the need for some school to provide leadership in instruction at the secondary-school level, Andover is developing an intensive course in Chinese language (Mandarin) as an elective course.

French

Before the outbreak of the French Revolution, French was considered the universal language of the West. It was the language of diplomacy, was already flourishing as a literary medium and, because of its clarity and precision, reflected both French culture and philosophy, influencing the development of democratic institutions in the United States as well as in other countries. The study of French rewards the student with the ability to communicate with French-speaking peoples and to appreciate the importance of order in expression, broadening his views through a growing familiarity with the rich and lively literature and civilization that the language represents.

German

German is central Europe's principal language, and knowledge of it opens up an understanding of European culture and affairs. Students may learn German to read the works of Goethe, Schiller, Lessing, Kafka, Hesse, Brecht and Grass in their original form, or to follow the arguments of Hegel and Nietzsche, or perhaps to understand more intimately the background of modern socialism and democracy in the world. Many of the most important developments in modern physics, electronics, chemistry and engineering were originally published in German, and American businesses are realizing increasingly the importance of personnel able to speak German.



Italian

The growing popularity of Italian in American schools and colleges reflects a growing awareness of the charm of the Italian language and of the rich cultural heritage which it serves. Andover's intensive course for Seniors attracts students with rich experiences in other languages, is conducted in Italian, and has the scope and pace of a course for college freshmen.

Russian

Approximately forty percent of Russian secondary school students are learning English. A fraction of one percent of American secondary school students study Russian. For cooperation, understanding, and influence, our doctors, diplomats, scientists, and businessmen should be able to communicate with Soviet counterparts in Russian.

Since secondary school is the best place to begin,

Andover has established a rich program for our beginning as well as our advanced students.

Spanish

The Spanish Department is anxious to help students discover the varied cultural heritage of the Spanish-speaking world through intensive study of the language, both spoken and written.

It seems particularly important to learn a language spoken everyday by millions of Americans across the U.S. In addition, Hispanic literature, from Cervantes to Borges, has played a vital role in world literature, as attested by the frequency with which Hispanic writers have been awarded the Nobel Prize for Literature.

Students who enter the professions will find Spanish an indispensable tool. But whatever they do, Spanish will be the key to a richer, more rewarding life.

MODERN FOREIGN LANGUAGES

Chinese and Italian offer an intensive introductory course for seniors. All other languages offer introductory and intermediate courses, with opportunities for acceleration at those levels. Students are then eligible for the following courses:

French

Language and Review and Contemporary French Life
Selected Readings
Village Français
French Civilization
Conversation and Phonetics
Written Expression
Literature and Film: French Theatre
French Literature
French History
French Civilization Outside of Europe
Québec et les Québécois
Stylistics
Advanced Placement
Contemporary Literature
German
Literature, Composition and Conversation
Language and Literature for Advanced Placement
Special Topics

Russian

Literature, Composition and Conversation
Advanced Literature, Composition and Conversation
Russian Press
Literature
Special Topics
Russian History and Literature

Spanish

Second and Third Year, Advanced, with winter term in Mexico
Spanish Language Review
Aspectos de la Cultura y Civilización del Mundo Hispánico
Introduction to Literature, with Grammar Review
Literature and Culture, with Grammar Review
Literature for Advanced Placement
Advanced Studies in Literature
Special Topics: Literature, Sociology, Culture
Latin American Studies

PHILOSOPHY AND RELIGIOUS STUDIES

The department seeks to initiate students into three distinctive human quests: the search for meaning, the search for justice and the search for the foundations of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered on a variety of topics, at a variety of levels, and involve four prepared class periods.

PHILOSOPHY AND RELIGIOUS STUDIES

Introduction to Religion
Non-Western Religions
Biblical World-view
Portraits of Jesus
Man's Search for Meaning
Introduction to Ethics
Bioethics
Law and Morality
Non-Violence
Responses to the Holocaust
In Search of Justice
Proof and Persuasion
Great Philosophers

SCIENCE

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers Andover students an introductory term-contained course in archaeology. The course deals with the prehistoric development of civilization and with archaeological theory and method. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas.

Biology

Andover provides ample opportunity to develop interest in the biological sciences. In addition to two year-long courses in introductory biology the department offers four courses on the advanced placement level and three elementary courses which are particularly well suited to serve younger students. The introductory courses give students a general background and an understanding of some of the current trends in biology. Field trips, laboratory work, independent projects, lectures, slides, films, and video tapes are all part of the courses. Most of the laboratory work performed during the Spring term is devoted to independent projects.

The term-contained advanced courses prepare students for the Advanced Placement Examination. These courses review some of the material presented in the introductory courses as well as introduce new concepts and techniques. The advanced laboratory work gives students experience with the techniques of chromatography, electrophoreses, spectrophotometry, centrifugation, statistical analysis and dissection. Computer simulations are also used on the Science Division's Apple II microcomputers.

Bird watching trips are sponsored occasionally throughout the year by the Natural History Club for interested students who may or may not be enrolled in a biology course. A small zoo, consisting of rats, mice, gerbils, and various reptiles is maintained in Evans Hall. Its population varies with student interest, the reproductive rate of the animals and the dietary needs of the resident boa.



In the basement of Evans Hall there is a superb bird collection on loan from Harvard University and an extensive shell collection is exhibited in various parts of the building.

The Evans Hall greenhouse is a refreshing place to visit during the long winter months. Students grow plants there or start potted plants for their own rooms. An environmental growth chamber is available for those interested in experimenting with photoperiodism.

Chemistry

The Chemistry Department offers full-year introductory courses at various levels which prepare students for more advanced work in chemistry.

Many students have undertaken laboratory projects. For example, one recent experiment involved the synthesis of sulfanilamide followed by an investigation of the effectiveness of the product as an antibiotic. Another examined the colors of optically active coordination compounds of cobalt. One student spent a term synthesizing organic compounds and examining their infrared spectra. Others have studied organic qualitative

analysis as an introduction to the chemistry of organic functional groups.

Students usually suggest their own experiments, but they can also adopt and change existing projects in a creative way. A student might design computer programs for chemistry problems, study the use of microchemistry to diminish school laboratory pollution, or explore molecular structures with infrared spectroscopy.

The department has the equipment for the usual experiments in elementary synthesis and analysis, including four Mettler electronic, analytical balances. There are instruments which enlarge the scope of feasible projects — a pH meter, several vacuum tube voltmeters, a Kontes Universal Electrode Kit, a Kern polarimeter, a Bausch and Lomb Spectronic 20 colorimeter and a Perkin-Elmer 700 infrared spectrophotometer. Six microcomputers are conveniently located in the Roscoe E.E. Dake Computer Room in Evans Hall.

Physics and Astrophysics

The Physics Department offers five introductory courses at various levels of difficulty in order to meet the needs of Andover students. Some representative topics are mechanics, waves, electromagnetism, light, and "modern physics." Laboratory work, classroom demonstrations and extensive problem solving enable students to develop both a qualitative and quantitative understanding of the concepts of physics. Also offered are courses including geology, electronics, astronomy, relativity and early quantum theory, and university-level Advanced Placement physics.

The Physics Department operates the Thornton Observatory which houses a research-grade 16-inch reflector, a 6-inch Brashear refractor and six other portable telescopes. These instruments are used in astronomy courses as well as in project work; recent projects have included such areas as solar, lunar and planetary study; astrophotography; computer simulations; and orbit analysis.

Past student projects have included laser transmission of information, holograms, the construction of an electronic calculator, speed of light measurements, determinations of the electronic charge and mass, interferometer measurements,

and finding the gravitational constant. Formal and informal contact with the faculty encourages students to examine the interaction of physics and the environment, including man, thus hopefully promoting better understanding of the processes of scientific investigation.

Psychology

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strategies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained.

ARCHAEOLOGY

Archaeology

SCIENCE

Introductory Physical Science

Introduction to Biological
Science

Astronomy – the Solar System

Oceanography

Ecology

Introduction to Zoology

Junior Science Honors

Animal Behavior

Observational Astronomy

Astronomy – The Universe

Beyond the Solar System

Geology

Biology

Introductory Biology

Anatomy and Physiology

Chemistry

Elementary Introductory Chemistry

Introductory Chemistry

Research in Chemistry

Elementary Organic Chemistry

Advanced Placement Chemistry

Honors Introductory Chemistry
– Advanced Placement

Physics

Introductory Physics

College Physics

Advanced Physics

Electronics

Relativity and Quantum
Mechanics

PSYCHOLOGY

Introductory Psychology

Human Relations

Human Sexuality

Group Therapy and Process



Dr. Charles Abbot, Class of 1891, a solar energy pioneer and head of the Smithsonian Institution for many years, predicted in the early 1940's that solar energy would become the primary source of power when oil and coal were depleted. In 1972 he received his last patent, for a device to convert solar energy into electricity, shortly before his 100th birthday.

OTHER COURSES

INTERDISCIPLINARY

Study Skills

Efficient Reading

Language Skills

Mythology

Food and Hunger in

Developing Nations

Contemporary Communications

Russian Literature in English

Soviet Literature in English

Greek Literature in Translation

Roman Literature in Translation

Typing (non-credit)

Etymology

PHYSICAL EDUCATION

All Juniors and new Lower

Middlers are required to elect one trimester of P.E. 10 in addition to their regular athletic commitment.

Physical Education





Complementary Programs

Andover's complementary programs combine a number of innovative ideas designed to promote better coordination between public and private education nationally. The concept behind these programs is that of multiple schools. While one school may be accepted as the "home-base" diploma-granting institution, several other institutions may be utilized as complements to this school. Thus far, the multiple schools ideas has taken form in several program models which are open to Phillips Academy students as well as students from other schools.

The Andover Summer Session

The Andover Summer Session is a short intensive academic program in which both innovative and traditional courses are taught in only six weeks. Courses in all subjects and at all levels demand hard work — harder work than most students have ever before experienced. Besides English, modern languages, mathematics, history, and the sciences, the curriculum offers such opportunities as Play Production Workshop, Social Psychology, Great Philosophers, Law and Morality, and Film Workshop, Modern Astronomy, Archaeology and Anthropology, Oceanography and Marine Biology, and Modern Economics.

Other features of the Summer Session are special courses in writing, including the nationally known "Competence in Reading and Writing" (developed at Andover); an expanded ESL Program (English as a Second Language) for foreign students who wish to achieve English fluency; and a Chamber Music Program which provides a unique opportunity for able music students in all combinations of piano, strings, winds, and voice, including individual instruction, small ensemble work, or-

chestra, and chorus; and an intensive Studio Art program for serious students of the visual arts who wish to develop a portfolio in preparation for the Advanced Placement Examination in Studio Art.

The Summer Session makes use of all the school's facilities and is open to able boys and girls from all parts of the country and abroad. Applicants must be graduates of the 9th, 10th, 11th or 12th grades. A catalog can be obtained by writing:

Phyllis Powell, Director
The Andover Summer Session
Phillips Academy
Andover, MA 01810
Tel. 617/475-3400, ext. 170

(MS)²: Math and Science for Minority Students

The (MS)² Program — Math and Science for Minority Students — offers Black, Hispanic, and American Indian students three consecutive tuition-free summers of intensive study of mathematics and science. Ninth grade boys and girls are selected on the basis of their superior ability and strong interest in mathematics and science and financial need. The goal of the (MS)² Program is to prepare minority students to compete successfully for admission to selective colleges and for careers in science, engineering and medicine. Further information can be obtained by writing:

Victor C. Young, Director
(MS)² Program
Phillips Academy
Andover, MA 01810



The Short Term Institutes

Andover has held a series of Short Term Institutes which are intensive, multi-week courses of study in a single subject, designed to offer high school students a unique residential learning experience. First taught in the fall of 1974, the Institutes offer a program in Art during winter term and special summer Institutes within the context of Summer Session. These Institutes are designed to provide intensive study in a particular field at Andover and to complement a student's home school program, not to compete with it.

School Year Abroad

School Year Abroad offers to qualified Upper Middlers and Seniors a full academic year of living and studying in France or Spain. Originated by Andover, SYA is now jointly sponsored by Andover, Exeter and St. Paul's School. The program gives American students the advantages of living in a foreign culture without sacrificing progress at their home schools or strong preparation for college. Students live with host families, participate in the activities of local athletic and social clubs, and pursue a course of study (both in English and Spanish or French) under the supervision of sponsoring school teachers. SYA offers 19 days of group travel, all college boards, and provides full academic credit, permitting students to graduate from Phillips Academy with their own class. School Year Abroad is financially independent of its sponsoring schools. Financial aid is available. A catalog can be obtained by writing:

Harrison F. McCann, *Director*
School Year Abroad
Phillips Academy
Andover, MA 01810

Other Off-Campus Programs

Andover offers several complementary residential programs. The Washington Intern Program, sponsored by Andover and Phillips Exeter Academy, allows a group of Upper Middlers and Seniors to spend the spring term in Washington working in the offices of U.S. Senators and Congressmen. Phillips Academy tuition, fees and financial aid do not cover the cost of this program.



The Mountain School Program of Milton Academy is a semester-long program for eleventh graders which offers students the opportunity to enjoy a different living and learning experience on a 300-acre farm in Vermont. Phillips Academy students may participate fall term only. Students will continue their academic courses in addition to activities which will emphasize practical skills and crafts. Students will work on the Mountain School farm which supplies most of the food and heat for the school.

In addition to school-sponsored programs, Seniors may arrange off-campus projects related to their special interests. Some have worked as interns with officials in local government and members of the Massachusetts legislature, while others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative and careful planning of a course of study that will meet diploma requirements and free a block of time during the term.



Athletics



Archie Bush, Class of 1866, returned from the Civil War to complete his studies and organized a baseball team for Andover's first interscholastic sports competition. When Archie and his friends cut a geometry class to attend a baseball game, Principal Samuel Harvey Taylor, who brooked no nonsense, kicked them out of school. The Trustees rescinded this action years later and granted them all diplomas. Too late for Archie, who had died on his honeymoon trip to Europe.

In sports, as in studies, students are expected to meet basic requirements and are given wide choice in broadening and deepening their skills, interests and dedication in athletics.

Upon arrival, all new students are given a swim test, and those who do not meet the requirement must take swim instruction as their fall afternoon sport. Juniors and new Lowers take the Physical Education Course five hours a week for one term in addition to afternoon athletics. While taking this course, students are tested for physical aptitude and counseled concerning any areas of deficiency.

The required afternoon athletic program includes a wide variety of offerings in varsity and junior varsity competitive interscholastic sports, in intramural cluster-organized athletics and in instructional, recreational and fitness activities. New students are strongly encouraged to participate for at least one term at Andover in a team sport or a dance performance program. Wherever numbers permit, separate interscholastic competitive team programs are created for Junior boys.

Upperclassmen have the opportunity to substitute an activity or project for one term of athletics a year. Each spring the department attempts to offer an evening Senior Life Saving course and a Water Safety Instructors' course, in addition to required athletics, for those swimmers who wish official accreditation.

The school maintains several athletic facilities which include 12 playing fields and 25 tennis courts; the Borden, Memorial and Abbot Gymnasium Complex with swimming and diving pools, basketball and squash courts, weight training room and other conventional gym spaces; the

newly renovated Case Memorial Cage with its indoor track; the Sumner Smith Hockey Rink; the crew boathouse on the Merrimack River; the ski trails and jump at Holt Hill; and finally the Search and Rescue Room in Evans Hall which provides the base of operations for Andover's popular outdoor program.

Phillips Academy is committed to a required athletic program that provides a variety of sports and activities to its students. The Academy discourages overspecialization in sports at this age level; the athletic program is a complement to, not a substitute for, the academic curriculum. The Athletic Department oversees the program and its facilities with the support and advice of the Faculty Athletic Committee and the Student Athletic Advisory Board.

Health Care

The Isham Infirmary of Phillips Academy is fully licensed as a hospital by the Commonwealth of Massachusetts. There is a full-time Physician Medical Director. The Infirmary has an x-ray department with a full-time technician. Basic laboratory services are also available at the Infirmary. Qualified physiotherapists are available either in the Infirmary or Trainers' Room. Graduate nurses are on duty twenty-four hours daily, and additional graduate nurses manage the Outpatient Services from 7:30 a.m. to 8:00 p.m. Isham Infirmary is staffed and equipped to care for most problems, and nearby general hospitals are available for major surgery or serious emergencies.

FALL TERM

Boys

Ballet
*Ceramics
*Community Service
Crew
Cross-Country
Cycling
Football
Jogging Fitness
Karate
Modern Dance
*Music
Paddle Tennis
*Photo Filed Trips
Search & Rescue
Soccer
Squash
Swim Fitness
Tennis
Yoga

Girls

Ballet
*Ceramics
*Community Service
Crew
Cross Country
Cycling

Field Hockey

Jogging Fitness
Karate
Modern Dance
*Music
Paddle Tennis
*Photo Field Trips
Search & Rescue
Soccer
Squash
Swim Fitness
Tennis
Volleyball
Yoga

WINTER TERM

Boys

Ballet
Basketball
*Ceramics
*Community Service
*Drama
Fitness
Gymnastics
Hockey
Jogging Fitness
Modern Dance
*Music
Paddle Tennis
Search & Rescue

Skiing:

Competitive (Alpine and Nordic)
Recreational (Cross Country)

Squash

*Stage Crew
Swimming
Track
Wrestling
Yoga

Girls

Ballet
Basketball
*Ceramics
*Community Service
*Drama
Fitness
Gymnastics
Hockey
Jogging Fitness
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Skiing:
Competitive (Alpine and Nordic)
Recreational (Cross Country)

Squash

*Stage Crew
Swimming
Track (non-competitive)
Yoga

SPRING TERM

Boys

Ballet
Baseball
*Ceramics
*Community Service
Crew
Cycling
Golf
Jogging Fitness
Karate
Lacrosse
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Softball
Squash
*Stage Crew
Team Cycling
Tennis
Track
Yoga

Girls

Ballet
*Ceramics
*Community Service
Crew
Cycling
Fitness
Golf
Karate
Lacrosse
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Softball
Squash
*Stage Crew
Team Cycling
Tennis
Track
Yoga

*Activities in place of sports are available one term a year to upperclassmen



In the 1840's the widow of Principal Osgood Johnson devoted herself to the care of sick Seminary students at Samaritan House, built and named for that purpose, now a student dormitory. In spite of this, rows of gravestones mark the toll of epidemics. An Academy graduate of 1890 reports that no such care as Widow Johnson's was available to the Academy students of the 1890's: "There was no infirmary. If you were ill, it was nobody's business but your roommate's, who brought you meals from Marland's unappetizing fare."

CALENDAR 1984-1985

Fall Term

Sept. 5, Wed.	Faculty return
Sept. 9, Sun.	New students arrive and register
Sept. 11, Tues.	Old students return and register
Sept. 13, Thur.	Classes begin
Oct. 19, Fri.	Mid-term academic review
Oct. 26-28 Fri.-Sun.	Parents' Weekend (all parents)
Oct. 29, Mon.	No classes
Nov. 21, Wed.	Thanksgiving vacation begins, 12:50 p.m.
Nov. 26, Mon.	Thanksgiving vacation ends, 8 p.m.
Dec. 3, Mon.	Classes end, 1:00 p.m.
Dec. 8, Sat.	Christmas vacation begins, 12 noon

Winter Term

Jan. 2, Wed.	Christmas vacation ends, 8 p.m.
Feb. 1, Fri.	Mid-term academic review
Feb. 4, Mon.	Mid-winter holiday (no classes)
March 4, Mon.	Classes end, 1:00 p.m.
March 9, Sat.	Spring vacation begins, 12 noon

Spring Term

March 26, Tues.	Spring vacation ends, 8 p.m.
April 22, Mon.	College Visiting Day (no classes)
April 26, Fri.	Mid-term academic review
May 27, Mon.	Classes end, 12:50 p.m.
May 31, Fri.	Spring trimester examinations end, 6 p.m.
June 2, Sun.	Commencement
June 6, Thurs.	Spring trimester academic review meeting, 9 a.m.
June 7-9 Fri.-Sun.	Alumni Reunions
June 27, Thurs.	Summer Session begins
Aug. 8, Thurs.	Summer Session ends

Admissions

APPLICATION PROCEDURE

Priority will be given to those candidates who complete the application procedure, including the interview, by February 1. A decision from the Admissions Committee will be mailed on March 10. The possibility of admission is considerably lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. It is also possible that 12th Grade and Postgraduate candidates will not be notified until late spring. A deposit of \$300 is required to reserve a place at the time admission is offered to an applicant.



L. to r., John C. McClement, Director of Financial Aid; Joshua L. Miner, Dean of Admissions; Robert P. Hurlburt, Admissions Officer; Jean C. McKee, Admissions Coordinator; Meredith Price, Associate Dean of Admissions; Grace H. Taylor, Administrative Assistant; James F. Ventre, Admissions Officer; Frank F. DiClemente, Liaison with Alumni Representatives. Not pictured: Elizabeth E. Moore, Admissions Officer.

4 STEPS TO BE COMPLETED FOR APPLICATION

1 Submit the Preliminary Application Card and the non-refundable \$20 fee as soon as possible. (Checks are payable to the Trustees of Phillips Academy.) **Application will not be considered unless the Preliminary Application Card and Fee are received.**

2 Complete the Personal Interview Requirement. Candidates must complete the required interview by February 1. Candidates are urged to schedule interviews in either the spring, summer, or early fall of the year before they intend to matriculate. It is in everyone's best interests for the interview to take place as early as practicable. A visit to the Academy is desirable as it gives candidates a chance to have questions answered and to see the school. Please allow two hours for the tour and interview and be sure to dress with the weather in mind. **Candidates who cannot visit the Academy are themselves responsible for arranging an interview with an Alumni Representative.** (See page 54.)

3 Return the Final Application Forms. Final application forms, mailed in mid-November to candidates who have filed preliminary applications, should be completed and returned as soon as final or mid-semester grades are available for the fall term. Priority consideration is given to applications completed by the advertised deadline of February 1. ("Late applicants" should return forms immediately.) Teacher recommendations should be from *current* teachers.

4 Take the Secondary School Admissions Test. (12th Grade or Postgraduate candidates are not required to take the SSAT. See next page.)

Secondary School Admissions Test

The Bulletin of Information for Candidates, published by the Educational Testing Service, Princeton, NJ 08540, will be sent by Andover to all 1984-85 candidates who have filed a Preliminary Application. This Bulletin describes the Secondary School Admissions Test, which will be given on the following dates:

December 8, 1984	March 2, 1985
January 19, 1985*	April 27, 1985*
June 15, 1985	

*International administration

Candidates are strongly urged to take the SSAT administered in December, 1984. (The December tests will not be given in foreign countries.) Otherwise, the candidate should take the January, 1985 administration.

Early Decision

Andover does not participate in any early decision plan for admissions.

Twelfth Grade or Postgraduate Candidates

Instead of the Secondary School Admissions Test, Senior and Postgraduate candidates must take the Preliminary Scholastic Aptitude Test or the College Board Scholastic Aptitude Tests (C.E.E.B., Box 592, Princeton, NJ 08540).

Postgraduates are full-fledged members of the Senior Class and are eligible for all school activities. Because of their academic credits, they frequently have maximum flexibility in course selection.

If you have a question:

About Andover's admissions or applications procedures, call or write the Admissions Office.

About an appointment: call or write the Appointment Secretary, Admissions Office.

To request a catalog, call or write the Admissions Office:

Admissions Office
Phillips Academy
Andover, Massachusetts 01810
Telephone: (617) 475-3400 x 196

Joshua L. Miner, Dean of Admissions

Office hours: Monday through Friday, 8:30 a.m. to 4:30 p.m.
Saturday, 8:30 a.m. to 12:00 noon

"Youth from Every Quarter"

The School's *Constitution*, written in 1778, states that Andover "shall be ever equally open to Youth of requisite qualifications from every quarter." With this principle in mind, the basic requirement for admission to Andover today continues to be evidence of sound character and strong academic achievement. The school is especially interested in candidates who demonstrate maturity and concern for others in addition to high performance in particular studies or activities. Valuing diversity in its student body, the school seeks to bring together a community from all parts of the country and from many nations.

The Admissions Committee selects from over 3,500 candidates the 440 most promising and deserving young people. The school's endowment covers approximately one-third of the cost of an Andover education. Therefore, in fact, every student receives financial aid. In addition, thanks to the generosity of a large number of alumni and friends, further financial assistance is available (see Financial Aid Section, page 53).

School Costs and Financial Aid

Tuition and Fees, 1984-1985

The Tuition charge for 1984-85 is \$9,200 for boarding students and \$6,975 for day students.

The average annual cost to educate a student at Andover is approximately \$13,200. The difference of \$4,000 between the annual cost and the Tuition charge is made up from gifts and income from endowment, which itself is the product of the generosity of alumni, parents and friends.

Day Students

Day students must live in Andover, North Andover, North Reading, Methuen or Lawrence.

To reserve a student's place for a given school year, a deposit in the amount of \$300 must be received by May 1 in the case of a returning student, or by

Phillips Academy admits students of any sex, race, color, national and ethnic origin to all the rights, privileges, programs and activities generally accorded or made available to students at the school. It does not discriminate on the basis of sex, race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

the acceptance deadline in the case of a new admission. It is non-refundable under any circumstances.

The tuition less the above deposit is billed in two equal amounts, with the Fall payment due August 1, and the final payment due December 1. The award of scholarship aid or loan reduces the billed amount accordingly.

An alternative is the use of the Insured Tuition Payment Plan, arranged with a private agency. Information about this alternative and an application form are sent to the parents before the first bill is due.

No refund will be made of the Fall tuition for any student who withdraws, is dismissed, or is absent for any reason after registration in the Fall. No refund will be made against the final payment for any student who withdraws, is dismissed, or is absent for any reason after returning to school at the beginning of the Winter trimester.

Beginning in 1984-85, an optional Tuition Refund Plan is offered, at 3% of tuition, to protect against the departure of a student for any reason. Under this plan 75% of the unused portion of the tuition for school days remaining is refunded.

These charges cover instruction, board, room (including basic furniture), physical training and most athletic privileges, use of laboratory equipment and material, admission to all authorized athletic contests and most authorized entertainments at George Washington Hall or elsewhere on campus, including the Saturday evening motion pictures.

The school charges do not include tutoring, language training, special instruction in music or certain athletics, materials fees for art courses, medical expenses, laundry, textbooks, dues to school organizations or breakage and damage to school property. The school charges do not include cost of participation in the Washington Intern Program, School Year Abroad, or other off-campus programs. The school provides uniforms and most athletic equipment. Students are required to bring their own footwear and urged to bring along whatever other personal athletic equipment they already possess. Bills for items not included in the school charges may be rendered at any time during the school year.

All charges must be paid by their due date in order to assure a student's place at the Academy. Students with past-due bills may be asked to leave any time. The diploma of the Academy will not be awarded to Seniors whose school accounts are not paid in full by June 1.

Other Expenses

The following expenses will generally be similar to those a student would experience if he or she were at home: athletic equipment; laundry and cleaning; dues and publications and spending money.

Travel expense will vary according to home location. Books and supplies depend on course selection, and are approximately \$500.

Financial Aid

Financial need should never discourage a student from applying for admission to Phillips Academy. Andover selects students for admission on the basis of qualifications, not financial circumstances.

Andover offers full Scholarship Grants for low-income families; Scholarship Grants and low-interest, deferred-payment Student Loans for a broad spectrum of need, and Parent Loans for upper-middle income parents.

Scholarship Grants: \$2,600,000 in 1984-85
Average grant: \$5305

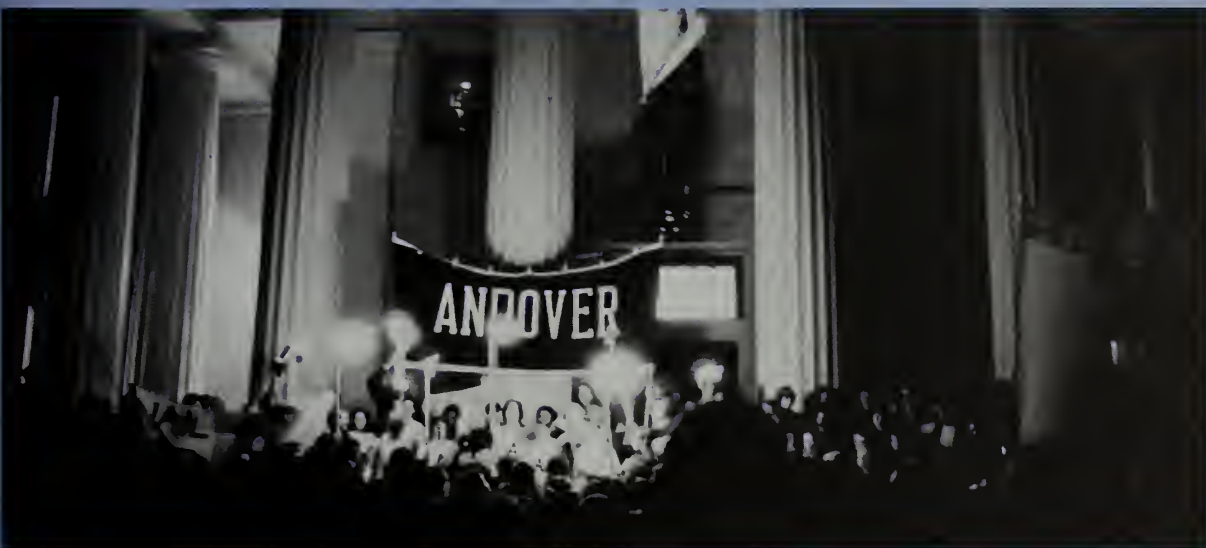
Student Loans: \$231,000 in 1984-85
(presently at 6% interest)

A moderate-interest Parent Loan Program is available to upper-middle income parents who do not qualify for Scholarship Grants or Student Loans, to help them spread educational costs more evenly over the school and college years.

Parent Loans: \$250,000 available in 1984-85
(presently at 12% interest)

If you are not sure whether you qualify for financial aid of some kind, we encourage you to apply; this is the best way to find out.

Because Andover values and seeks an economically diverse student body, aid is awarded only on



a basis of need. In 1984, no qualified student was denied admission for financial reasons.

Need depends on many variables, such as family income, number of children, age of parents, other tuitions, unusual medical expenses, taxes, assets, liabilities, etc.

To apply for financial aid:

1. When you make out the Preliminary Application, check "yes" for Financial Aid.
2. Andover will send you the Parents' Financial Statement (PFS). Fill it out and send the original to the School Scholarship Service in Princeton, NJ. The SSS uses a formula nationally accepted among independent schools to analyze need, and provides Andover with a preliminary estimate of your family's ability to contribute to educational expenses. The process assures that all schools to which a student applies will base their calculations on the same data.
3. Send a copy of the PFS to Andover prior to January 15, along with the most recent IRS 1040 form, or other income tax form used.

Requests for aid filed after the January 15 deadline may not be processed in time to be included in the initial allotment of scholarship funds. Requests filed after January 15 must await subsequent availability of scholarship monies.

In case of divorced or separated parents:

The resources of both natural parents must be considered in cases where a divorce or separation has taken place. This information should be provided on the Parents' Financial Statement (PFS). The availability of complete information from both parents is essential to assure a fair assessment of the family contribution. Lack of this information may result in no awarding of aid or an arbitrarily low financial aid package.

Financial aid award letters are mailed in the same envelope as the Certificate of Admission, on March 10.

Parent Loan Plan:

A Parent Loan Plan is available, at a modest rate of interest, to families in the \$30,000 to \$90,000 income range, as their needs require, with preference given to students entering 9th and 10th grades. Repayment of these loans begins immediately, but re-

payment of the principal is deferred during the students' college years and then continues for two additional years.

For more detailed information, direct your letter or telephone call to the Director of Financial Aid, Phillips Academy, Andover, MA 01810. Telephone: 617-475-3400 (ext. 196).

Alumni Representatives

While it is advisable from the student's point of view to visit the school, distance frequently renders a visit impractical. When this is the case, the candidate should write or telephone for an interview with the most conveniently located Alumni Representative. (Please see list on page 55.) When you arrange for an interview with an Alumni Representative, please notify the Andover Admissions Office of the date of the interview and the name of the interviewer. This procedure will help us keep your records up to date. A candidate unable to arrange for an Alumni Representative Interview should communicate with the Admissions Office for assistance.

Admissions Travel Schedule

During the fall term Admissions Office representatives plan to be in the following areas:

Montreal
New York City/Brooklyn
Denver/Los Angeles/San Francisco
Chicago/Detroit/Cleveland/St. Louis
Washington, D.C./Baltimore/Pittsburgh
North Carolina/Philadelphia
Dallas-Fort Worth/Houston
Minneapolis/Atlanta/Miami

ALABAMA

Birmingham

A. Henry Gaede, Jr. '57
Bradley, Arant, Rose & White
1400 Park Place Tower 35203
(205) 252-4500

Mobile

David F. Dean, M.D. '56
2451 Fillingim St. 36600
(205) 476-5700

ALASKA

Anchorage

John K. Brubaker '55
Delaney, Wiles, Hayes,
Reitman & Brubaker
1007 W. 3rd Ave. 99504
(907) 279-3581

Fairbanks

Kelly A. McMullen '66
Star Route Box 10088 99701
(907) 479-2964

ARIZONA

Fort Huachuca

Lt. John H. Chory '76
P.O. Box 2528
CO. F USAICS 85613
(602) 458-6950

Litchfield Park

George T. French '29
P.O. Box 579
609 N. Litchfield Rd. 85340
(602) 935-3216

Phoenix

Mrs. L. Don (Geraldine Treadway)
Miller '47
Arizona Public Service, Station 5629
P.O. Box 21666 85036
(602) 271-2983

Tucson

John S. Greenway '42
2200 E. Elm Street 85719
(602) 325-1541
Prof. Richard L. Morse '53
1939 E. 3rd. St. 85719
(602) 884-8860
Donald B. Rollings '70
363 S. Meyer 85701
(602) 622-7984/623-4091

ARKANSAS

Forrest City

Henry Loeb III '39
Growers Equipment Inc.
125 Hill Street 72335
(501) 633-1410



Little Rock

Mose Smith III, M.D. '48
5326 West Markham St. 72205
(501) 664-1527

CALIFORNIA

Beverly Hills

Thompson K. Vodrey '52
1529 Gilcrest Dr. 90210
(213) 275-5529

Corona Del Mar

John E. Kidde '64
3907 Inlet Isle Dr. 92625
(714) 640-7075

Fresno

Geoffrey M. Brittin, M.D. '52
St. Agnes Hospital
1303 E. Herndon Ave. 93710
(209) 449-3120

Graton

William D. Lynch '38
P.O. Box 498 95444
(707) 823-1806

Huntington Beach

James B. Blackmon '57
McDonnell Douglas Astronautics
5301 Bolsa Ave. 92647
(714) 896-4007

LaJolla

Kevin O'Brien '71
Dean Witter & Co., Inc.
1020 Prospect St. 92038
(619) 459-2331

Livermore

Patrick J. O'Hern '65
Lawrence Livermore National
Laboratory 94550
(415) 422-1960

Long Beach

Alan L. Fox '60
Petrolane Incorporated
P.O. Box 1410
1600 E. Hill St. 90801
(213) 427-5171

Los Angeles

Mary M. Camp '78
Kidder, Peabody & Co., Inc.
600 Wilshire Boulevard, Suite 1550
90017
(213) 485-1100

David A. Cathcart '57
Gibson, Dunn & Crutcher
333 S. Grand Ave. 90071
(213) 229-7308

Robert J. Cathcart '64
Allen, Matkins, Leck, Gamble
& Mallory

515 S. Figueroa St., 8th Floor
90071 - 3398
(213) 622-5555

George W. Davis III, M.D. '52
4616 Keniston Ave. 90043
(213) 294-1226

Russell K. Decker '56
Decker Management Systems
515 S. Flower St., Suite 325 90071
(213) 489-2170

Walter L. Farley, Jr. '28
12300 1st Helena Dr. 90049
(213) 476-1028

Mrs. Felix (Elizabeth Gorsuch)
Figus '42
818 N. Doheny Dr. #703 90069
(213) 550-1971

Trevor A. Grimm '56
Kaplanis & Grimm
551 S. Oxford Ave. 90020
(213) 380-0303

Jeffrey Hiroto
1133 Hicks Ave.
90063

Tim McChristian '73
4225 Via Arbolada #532 90042
(714) 863-0333

Christopher L. Rafferty '66
Union Venture Corporation
445 S. Figueroa St. 90071
(213) 687-5587

Alumni Representatives

Menlo Park

Carey Orr Cook '61
1065 San Mateo Drive 94025
(415) 321-0708

Peter Lee '60
1100 Trinity Drive 94025
(415) 854-3207

William M-S Lee '51
271 West Floresta Way 94025
(415) 854-4918

Miranda

Craig B. Reynolds '73
P.O. Box 495 95553

Oakland

Jonathan Harris '78
5701 LaSalle Ave. 94611
(415) 339-1393

Thomas E. Pollack III '61
6039 Bullard Dr. 94611
(415) 398-3825

Palo Alto

Henry E. Riggs '53
634 Lowell Ave. 94301
(415) 497-9325

Donald A. Way '63
Thoits Insurance
541 Cowper St. 94301
(415) 324-0606

Pasadena

Graeme Henderson '52
1613 Vista Lane 91103
(213) 449-6152

Judy Mustille '66
1146 Wellington Ave. 91103
(213) 793-4964

Riverside

Peter C. Parsons '55
Riverside County Publishing Co.
P.O. Box 8368 92515
(714) 689-1122

San Diego

Norman R. Allenby '51
Hillyer & Irwin
530 "B" St., Suite 1400
92101-4479
(619) 234-6121

San Francisco

William D. Sherman '60
Bay Area Alumni Rep Coordinator
Pillsbury, Madison & Sutro
225 Bush St. 94104
(415) 983-1000

Hobart M. Birmingham, Jr. '62
Bank of America Bldg.

555 California St.
34th Floor 94104
(415) 391-4500

Patrick A. Cathcart '64
Hancock, Rother & Bunshoft
Four Embarcadero Center 10th Floor
94111
(415) 981-5550

Bryan G. Miller '66
Baker and McKenzie
101 California St., Suite 2600
94111
(415) 576-3000

Samuel R. Miller '66
Morrison & Foerster
One Market Place
Spear Street Tower 94105
(415) 777-6230

Martin Quinn '60
Rogers, Joseph, O'Donnell & Quinn
505 Sansome St. 14th Floor 94111
(415) 956-2828

H. Leonard Richardson '45
1869 California St. #2 94109
(415) 776-1355

William W. Sterling '57
Heller, Ehrman, White & McAuliffe
Suite 3000
44 Montgomery St. 94104
(415) 772-6084

San Rafael

William S. Creighton '39
32 Woodoaks Dr. 94903
(415) 492-0637

Santa Ana

Reginald D. Barnes, Jr. '58
Crysen Services, Inc.
825 Parkcenter Drive 92705
(714) 835-6505

Santa Barbara

Jonathan E. Mudge '75
980 Canon Rd. 93110
(805) 682-0844

Santa Rosa

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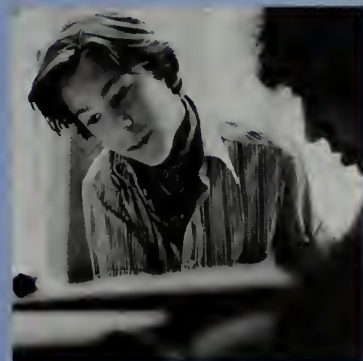
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(803) 723-6199

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Disher, Hamrick & Myers, Inc.
P.O. Box 632
2 Prioleau St. 29402
(803) 577-4115

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(803) 722-1681



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(803) 782-8540

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1621 Rutland Crt. 29206
(803) 782-1611

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Knoxville

John Muldowny '49
Department of History
1104 McClung Tower
University of Tennessee 37916
(615) 974-5421

Memphis

Mrs. Richard E. (Lisa M. Doyle)
Duerr, Jr. '70
6456 Sulgrave Dr. 38119
(901) 685-7224

Peter R. Formanek '62
Malone & Hyde, Inc.
1991 Corporate Ave. 38132
(901) 345-4212

TEXAS

Austin

John D. Brady '74
P.O. Box 5939 78763
(512) 480-0500

Austen H. Furse, Jr. '40
1801 Lavaca, 14-D 78701
(512) 477-1144

Bellaire

Gaylord Johnson, Jr. '57
5959 West Loop South, Suite 230
77401
(713) 664-3191

Big Bend

James E. Liles, Chief Ranger '55
Big Bend National Park 79834
(915) 477-2251

Carrollton

Charles D. Burnside '58
2415 Northshore 75006
(214) 245-5274

Dallas

Bruce Calder '41
Bruce Calder, Inc.
1200 Hartford Building 75201
(214) 744-0211

John T. Lansing '62
9403 Faircrest 95238
(214) 349-4169

John R. Sears, Jr. '67
4072 Hanover 75225
(214) 691-2213

El Paso

John D. Mason, Jr. '42
5812 Dumont 79902
(915) 581-6835

Fort Worth

Mrs. Garland (Mollie Lupe)
Lasater, Jr. '56
1208 Washington Ter. 76107
(817) 732-3722

Garland Lasater, Jr. '56
Transport Life Ins. Co.
714 Main Street 76102
(817) 390-9012

Edwin S. Ryan '49
Thomas M. Ryan & Co.
711 Baker Bldg. 76102
(817) 335-1276

Houston

Carolyn Appen '76
Intsel Southwest
11310 W. Little York 77041
(713) 937-9500

William W. Cline '69
Cline Bros. Exploration Co.
800 Main Bldg. 8th Floor 77002
(713) 757-1665

Marshall P. Cloyd '58
8 Pinewood Circle 77024
(713) 464-3331

Thomas J. Keefe, Jr. '50
4 Shadowlawn Circle 77005
(713) 528-2839

Paul L. Kelly '58
Rowan Companies, Inc.
1001 Fannin, Suite 2470 77002
(713) 654-7081

Frank Parker Lee '75
Fayez Sarofim & Co.
Two Houston Center, Suite 2907
77010
(713) 654-4484

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Schroder Energy Associates, Inc.
2350 Texas Commerce Tower 77002
(713) 228-8260

Midland

Logan E. Sawyer, Jr. '64
1405 Community Lane 79701
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UTAH

Salt Lake City

Lincoln D. Clark, M.D. '42
University of Utah
School of Medicine
50 N. Medical Dr. 84132
(801) 581-7958

C. Chauncey Hall, M.D. '41
2652 E. 6200 South 84121
(801) 277-1555

Robert L. Lux '62
1904 S. 2500 E 84108
(801) 484-0651

VERMONT

Essex Junction

William Cruikshank, Jr. '59
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(802) 879-7877

Middlebury

C. Andrew Kaiser '45
R.D. #2 05753
(802) 758-2460

Williston

Stuart Sawabini '73
Rossignol Ski Co.
Industrial Ave. 05495
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VIRGINIA

Alexandria

James E. Hinrich '56
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Apt. 151, Hamlet Park 22311
(703) 931-2279

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5341 Taney Ave. - 301 22304
(703) 751-1570

Charles A. Leach '47
5341 Taney Ave. - 301 22304
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1103 E. Durwood Cres. 23229
(804) 288-3695

Robert G. Leadbitter '60
Total Offset Printers, Inc.
6 W. Cary St. 23220
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WASHINGTON

Bainbridge Island

Holt W. Webster '39
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(206) 454-5314
Walter S. Kimball, M.D. '30
3404 76th Ave., N.E. 98004
Evergreen Point
(206) 454-7385

Mercer Island

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7615 East Mercer Way 98040
(206) 232-6199
John Poinier, Jr. '53
4558 91st S.E. 98040
(206) 232-4382

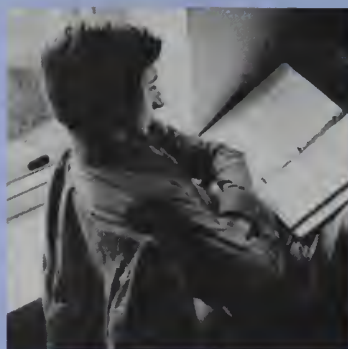
Seattle

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4 South Idaho St. 98134
(206) 622-6470

WEST VIRGINIA

Charleston

William A. Pugh '39
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St. Albans

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Racine

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WYOMING

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Story

Maurice Leon, Jr. '42
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Meridan Bennett '45
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American Embassy
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Chaussee delaHulpe 1170
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02/648 45 48

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Hugh C. Masters '40
Queens Cove B-3
5-56
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Chromatic Pen (H.K.) Ltd
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FRANCE

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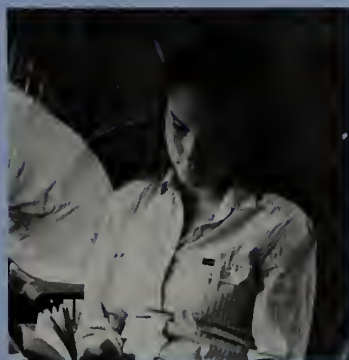
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MOROCCO

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Joseph A. McPhillips III '54
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Tel: (089) 28-60-21

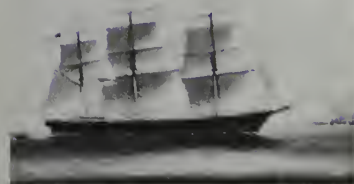
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Beograd

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American Embassy
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11000 Beograd
Tel: (38-11) 645-655 X111



STATISTICAL INFORMATION for 1983-1984



In 1864 Shimeta Neesima left Japan as a stowaway on the clipper ship "Wild Rover" for America and sold his samurai sword for a Chinese New Testament. He was adopted by the shipowner, an Andover Trustee, was christened Joseph Hardy Neesima, graduated from Andover in 1867, later from Amherst and the Andover Theological Seminary, and became the first Japanese to be ordained a Congregationalist minister. Neesima returned to Japan to found The Doshisha, a great university in Kyoto dedicated to Japanese and Christian ideals. Doshisha recently celebrated its 100th birthday.

Geographical Distribution*

Alabama	1
Alaska	1
California	73
Colorado	12
Connecticut	80
Delaware	1
District of Columbia	16
Florida	16
Georgia	9
Guam	1
Illinois	31
Indiana	7
Iowa	8
Kansas	1
Kentucky	2
Louisiana	2
Maine	22
Maryland	20
Massachusetts	190
	Boarding Day 253
Michigan	8
Minnesota	8
Mississippi	8
Missouri	3
Montana	2
Nebraska	6
Nevada	2
New Hampshire	27
New Jersey	36
New Mexico	4
New York	156
North Carolina	12
Ohio	17
Oklahoma	1
Oregon	4
Pennsylvania	25
Puerto Rico, USVI	4
Rhode Island	6
Tennessee	4
Texas	16
Vermont	14
Virginia	14
Washington	1
Wisconsin	8
Wyoming	1
Total U.S.	1133

*Based on place of residence, not citizenship.

Bahamas	2
Botswana	1
Brazil	1
Canada	13
Chile	1
China, Republic of	2
China, People's Republic	4
Cyprus	1
France	5
Germany	3
Great Britain	1
Greenland	1
Guatemala	1
Hong Kong	8
Italy	1
Ivory Coast	1
Japan	2
Korea	4
Liberia	1
Morocco	1
Nepal	1
Netherlands Antilles	2
Saudi Arabia	2
Singapore	2
Spain	4
Thailand	2
Tunisia	1
Venezuela	5
Yugoslavia	2
Zambia	1

Total Foreign 76
SCHOOL TOTAL 1209

	Girls	Boys	Total
Seniors	163	254	417
Uppers	152	198	350
Lowes	131	162	293
Juniors	56	93	149
	502	707	1209
Total Boarding Students			956
Total Day Students			253
TOTAL			1209

College Matriculations for the Class of 1983

The Class of 1983 applied to 165 different colleges and matriculated at 79 colleges and universities across the country.

COLLEGE	AD- MITTED	MATRIC- ULATED	COLLEGE	AD- MITTED	MATRIC- ULATED
Amherst	6	3	Oberlin	14	2
Babson	1	1	Parsons Sch. Design	1	1
Barnard	18	7	Univ. of Penn.	40	14
Bates	8	1	Pomona	7	1
Boston College	13	3	Pratt Institute	1	1
Boston Univ.	14	2	Princeton	15	9
Bowdoin	5	4	Principia	1	1
Brandeis	8	1	R.P.I.	12	3
Brown	47	23	Rice	10	4
Univ. of California			Univ. of Rochester	17	1
Berkeley	65	26	St. Lawrence	5	1
Santa Cruz	2	1	Smith	8	2
Carnegie Mellon	14	1	U.S.C.	6	2
Colgate	6	1	Stanford	27	13
Univ. of Colorado	14	1	Swarthmore	7	3
Columbia	41	19	Syracuse	9	1
Conn. College	23	3	Univ. of Texas	3	1
Cornell	25	10	Univ. of Toronto	3	1
Dartmouth	30	16	Trinity, Conn.	26	8
Denison	4	2	Trinity, Texas	1	1
DePauw	3	1	Tufts	18	8
Duke	20	4	Union	4	2
Georgetown	20	6	US Military Academy	4	4
Grinnell	1	1	Vanderbilt	18	3
Hamilton	10	2	Vassar	20	3
Harvard	42	27	Univ. of Vermont	15	5
Holy Cross	12	3	Villanova	2	1
Johns Hopkins	22	5	Univ. of Virginia	12	1
Julliard	1	1	Washington Univ.	5	1
Univ. of Kansas	1	1	Univ. of Washington	2	1
Lafayette	8	2	Wesleyan	35	10
Lehigh	5	1	Wheaton	3	1
Lewis and Clark	3	2	Wheelock	1	1
Macalester	4	1	William & Mary	14	3
McGill	9	1	Williams	8	4
Univ. of Michigan	41	11	Yale	34	24
Middlebury	20	10			
Mt. Holyoke	12	3			
Newcomb	12	2			
U.N.H.	15	4			
N.Y.U.	15	1			
State Univ. of N.Y.	3	1			
Northeastern	2	1			
Northwestern	40	8			

College Admissions

Admission to colleges is not based on a student's mere presence at Andover, but is based on how well the student has used this experience. All selective colleges exercise judgments relative to factors over and above academic ability in selecting a freshman class. While some of these factors relate to exceptional talents in one area or another, others are related to diversity in background and educational objectives.

The college admissions picture is entirely different and infinitely more complex now than it was in past decades. Competition for admission to selective colleges is rigorous, and Andover students are encouraged to apply across a range of choices to colleges with varying degrees of selectivity. The one constant in all of this should be a real desire to educate oneself. To this end the College Counseling Office works with the class as a whole and with each candidate to help each one draw up a list of colleges that makes sense.

Phillips Academy seniors go to college well prepared for the academic program and social experience that lies ahead.





TRUSTEES

MELVILLE CHAPIN '36

A.B., J.D.

President

elected 1974

elected President, 1981

Cambridge, Massachusetts

DONALD W. McNEMAR

B.A., M.A., Ph.D.

Clerk

elected 1981

Andover, Massachusetts

CHARLES APPLETON MEYER '35

A.B.

Treasurer

elected 1969

elected Treasurer 1976

Lake Forest, Illinois

ROBERT LIVINGSTON IRELAND III '38

A.B., LL.B.

elected 1960

New York, New York

GERARD PIEL '33

A.B., D.Sc., Litt.D., L.H.D., LL.D.

elected 1969

New York, New York

WILLIAM WADE BOESCHENSTEIN '44

S.B.

elected 1971

Perrysburg, Ohio

CAROL HARDIN KIMBALL '53

A.B.

elected 1974

New York, New York

RICHARD LEE GELB '41

A.B., M.B.A.

elected 1976

New York, New York

STEPHEN BRADNER BURBANK '64

A.B., J.D.

elected 1980

Philadelphia, Pennsylvania

ELIZABETH PARKER POWELL '56

B.A., M.A., M.B.A.

elected 1980

Wellesley Hills, Massachusetts

FREDERICK W. BEINECKE II '62

B.A., J.D.

elected 1980

New York, New York

THOMAS H. WYMAN '47

B. A.

elected 1980

New York, New York

DAVID M. UNDERWOOD '54

B.A.

elected 1983

Houston, Texas

Alumni Trustees

PHILIP M. DRAKE '43

A.B., LL.B.

elected 1980 for four years

Greenwich, Connecticut

ANNE OLIVER JACKSON '53

A.B.

elected 1980 for four years

Sewickley, Pennsylvania

CLINTON J. KENDRICK '61

B.A., M.B.A.

Ex Officio as Chairman

of the Alumni Fund

elected 1981 for two years,

extended to 1985

London, England

STEPHEN B. CLARKSON '55

B.A., LL.B.

elected 1982 for two years

Bethesda, Maryland

RICHARD D. LOMBARD '49

B.A., M.B.A.

elected 1982 for four years

Rye, New York

FRANCES YOUNG TANG '57

B.S.

elected 1982 for four years

New York, New York

Trustees Emeriti

SUMNER SMITH '08

A.B.

1956-1960

Lincoln, Massachusetts

CHARLES STAFFORD GAGE '21

A.B., A.M.

1952-1976 (Treasurer 1966-1976)

New Haven, Connecticut

PHILIP KIRKHAM ALLEN '29

A.B.

1969-1980

Andover, Massachusetts

GEORGE BUSH '42

A.B.

1967-1980

Washington, D.C.

DONALD HOLMAN McLEAN, JR. '28

A.B., LL.B.

1958-1981 (President 1968-1981)

Andover, Massachusetts

JOHN LEWIS COOPER '31

A.B.

1968-1981

Dover, Massachusetts

JOHN USHER MONRO '30

A.B.

1958-1983

Jackson, Mississippi

HEADMASTER'S OFFICE

DONALD WILLIAM McNEMAR
Headmaster

B.A., M.A., Ph.D.

PETER QUACKENBUSH McKEE
Associate Headmaster
A.B., Ed.M.

JANE H. MUNROE
*Executive Secretary to the
Headmaster*

OFFICE OF THE DEAN OF FACULTY

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A.B., M.A.T.

WILLIAM FRANKLIN GRAHAM
Clerk of the Faculty
S.B.

THERESA A. LEWANDOWSKI
Secretary to the Dean of Faculty
B.S.

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Dean of Studies
A.B., A.M.

HERBERT HARRY MORTON III
Registrar
A.B.

DAVID A. PENNER
Scheduling Officer
A.B., M.A.

JOAN F. SCHLOTT
Recorder
B.S.

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DAVID OWEN COBB
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A.B., A.M.

CARL EDWARD KRUMPE, JR.
Abbot Cluster
A.B., A.M.

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Pine Knoll Cluster
ScB., M.A.L.S.

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Rabbit Pond Cluster
A.A.

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West Quadrangle South Cluster
A.B., M.A.T.

SYLVIA L. THAYER
Flagstaff Cluster
A.B.

HENRY B. WILMER, JR.
West Quadrangle North Cluster
B.A., M.A.

CARROLL WESLEY BAILEY
Director of Residential Affairs
A.B., J.D.

PRISCILLA K. BELLIZIA
Associate Dean
B.A., M.A.T.

BUSINESS OFFICE

GEORGE A. NEILSON, JR.
Business Manager
B.S., M.Ed.

SUSAN GARTH STOTT
Assistant Business Manager
B.A., M.C.R.P.

DONALD HENRY BADE
Comptroller
B.B.A.

OFFICE OF ADMISSIONS AND FINANCIAL AID

JOSHUA LEWIS MINER
Dean of Admissions
A.B.

MEREDITH PRICE
Associate Dean of Admissions
A.B., M.A.T.

JOHN C. McCLEMENT
Director of Financial Aid
A.B., M.Ed.

JEAN C. McKEE
Admissions Coordinator
A.B.

FRANK F. DiCLEMENTE
Liaison with Alumni Representatives
S.B.

ROBERT P. HULBURD
Admissions Officer
A.B., M.A.

JAMES F. VENTRE
Admissions Officer
A.B.

ELIZABETH E. MOORE
Admissions Officer
B.A.

FACULTY 1983-84

The date following the name indicates the year the instructor joined the Andover faculty. This reflects the faculty for the 1983-84 school year.

DONALD W. McNEMAR
(1981)

Headmaster on the Foundation in honor of John P. Stevens, Jr. '15; Instructor in History and the Social Sciences

B.A., Earlham; M.A. Princeton;
Ph.D. Princeton

PETER QUACKENBUSH McKEE
(1947)

Associate Headmaster; Chairman Physics Dept.; Chairman Science Division; Instructor in Physics on the Donna Brace Ogilvie Teaching Foundation

B.A. Middlebury; Ed.M. Harvard

DOROTHY Y. JUDD (AA 1948)
Instructor in Spanish

B.S. William and Mary; M.A.
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GORDON GILMORE BENSLEY
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Instructor in Art on the Ammi Wright Lancashire Foundation
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B.S. Pennsylvania State University;
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Instructor in Physical Education
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A.B. Yale; M.Ed. University of
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Instructor in Spanish
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Instructor in Chemistry on the Martha Cochran Foundation

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B.S.E. Princeton; M.A. Northwestern

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B.A. Amherst; M.A. University of Maryland

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Director of Energy Conservation
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JAMES LEIGHTON BUNNELL (1967)

Director of Summer Session; Instructor in History and the Social Sciences

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Director of Athletics on the John H. Castle, Jr. Instructorship; Instructor in German

B.A. Yale, M.A. Middlebury

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Instructor in Physical Science
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JAMES ROBERT WILSON (1967)

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SAMUEL IRVINE ALLISON ANDERSON (1968)

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A.B. Harvard; Diplome d'etudes
University de Paris; A.M. Columbia;
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DAVID OWEN COBB (1968)

Dean of Residence; Instructor in English

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Instructor in Mathematics

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Licence es Lettres, Maitrise,
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 B.A. Antioch; M.F.A. Tufts
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- VINCENT B.J. AVERY (1976)
Chairman, Department of Philosophy and Religious Studies; Instructor in Religion and Philosophy
S.T.L., Ph.D., Academic
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- SARAH ANNE DOOLITTLE (1976)
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- HARRISON FAIRFIELD McCANN (1976)
President, School Year Abroad
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- PHYLLIS WENDOVER POWELL (1976)
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Jewish Chaplain; Instructor in Religion and Philosophy
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- LOUIS M. BERNIERI (1977)
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- THOMAS SALKALD HODGSON (1977)
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- JAMES L. SHELDON (1977)
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- CHARLES ALLEN WILLAND (1977)
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- BRUCE SMITH (1978)
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- CAROLE BRAVERMAN (1979)
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- ANDREW J. CLINE (1979)
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- CARMEL RODRIGUEZ-WALTER (1979)
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- PAMELA BROWN (1980)
Academic Counselor, Director Academic Counseling Program
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Acting Chairman Russian Department 1983-84, Instructor in Russian
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A.B. Wellesley

MARGOT ADLER WELCH (1982)

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B.A. Bennington; M.W.

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*Director of (MS)², Instructor
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JENIFER M. COOKE (1983)

Data Base and Alumni

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B.A. Dartmouth

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TIMOTHY D. DEMPSEY (1983)

College Counselor

B.A. Connecticut College

ADA M. FAN (1983)

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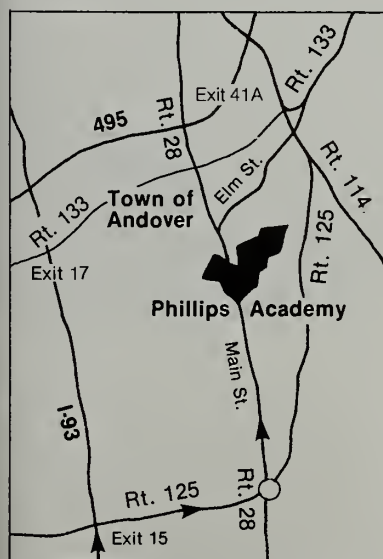
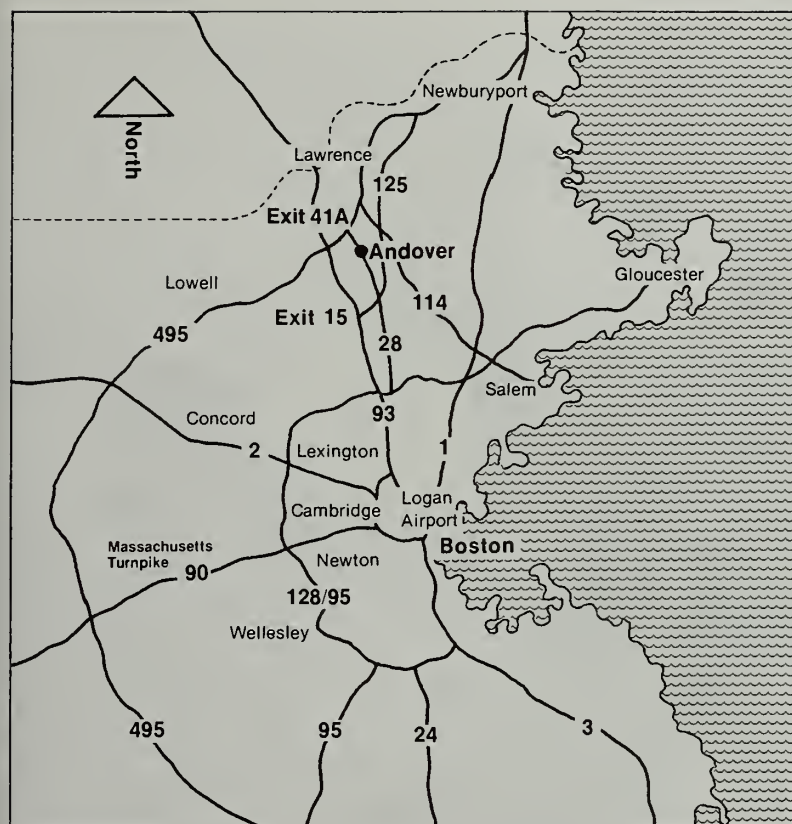
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Inns and Motels in the Area

Andover Inn
Chapel Avenue, Andover
617/475-5903

Holiday Inn
Winthrop Avenue
Lawrence
617/686-9411

Koala Inn
River Road
Andover
617/685-6200

TRAVELING TO ANDOVER

If traveling by car from Boston, take Route 93 north for about 19 miles. Take Exit 15, then turn right (east) on Route 125 for 2 miles. Turn right onto Route 28 and go north about 4 miles to the Andover campus. Turn right at the Bell Tower on the corner of Route 28 and Salem Street. The Admissions Office is the first building on the right.

If driving from Logan Airport, follow the signs to Boston via the Sumner Tunnel and follow Route 93 north signs.

From Route 495 north or south take exit 41A marked Andover and proceed south on Route 28 through the town of Andover. The Phillips Academy campus is approximately one mile south of the Andover center. Turn left on Salem Street, by the Bell Tower.

The Trombly Motor Coach Service runs buses to Andover from the Boston Gray Line, Essex Hotel, 215 Essex St., Dewey Square, Boston. Visitors should call the bus terminal in Boston 617/451-1410 for up-to-date information.

Sheraton Rolling Green Motor Inn
Lowell Street, Andover
617/475-5400

Merrimack Valley Motor Inn
Route 125, Chickering Road
North Andover
617/688-1851

Hendricks' Bed and Breakfast
475-3698



ANDOVER

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**1984-85
Andover
Course of Study**

Phillips Academy

Course of Study 1984-1985

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Course of Study

The curriculum of Phillips Academy comprises a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Placement in the year-level of a subject may be independent of a student's grade in school; through advanced placement at entrance or accelerated courses, many students fulfill requirements ahead of the normal year, thereby gaining increased opportunity for college-level or other elective courses. Instruction is given in all subjects usually required for entrance to higher institutions.

Classroom groups are small enough to permit individual attention, and students are placed in sections fitted to their skill level. Accelerated sequences and advanced courses offer particularly able and well-prepared students opportunity to progress at a rate commensurate with their ability and ambition. Most departments offer courses beyond the level of preparation for college.

For full membership in a given class, students should have credit for the work of the lower classes or its equivalent. However, students are rated as members of a given class if their deficiencies for full membership in it do not exceed a certain number of trimester courses.

Every student is assigned to an Academic Advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements, and the student's particular interests. Students should familiarize themselves with the Academy's basic curriculum—both its requirements and its flexibility.

Members of the Upper Middle and Senior classes should become aware of the entrance requirements of the colleges they may wish to enter.

The Trimester Plan

The academic year is separated into three trimesters. There are two types of weekly class schedules: one during which classes meet only Monday through Friday, and the other during which classes also meet on Saturday morning. There are roughly equal numbers of these five and six-day weeks in each trimester. Within a given week classes are

scheduled to meet according to varying patterns: some for four fifty-minute periods; others for five such periods; and a few seminar and studio courses for two two-hour blocks. Many departments offer year-long courses as well as those which are term-contained (completed in one trimester). The diploma requirements are stated in terms of full-year courses or trimester courses, depending on the academic area involved.

Special courses in Foreign Languages

Special courses covering the work of two years in one are open to qualified Seniors in Chinese, German, Greek, Italian, Latin, Russian, and Spanish. These 10-20 courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and therefore are not recommended for students of limited language ability. Entering Seniors with no previous foreign language experience must pass a 10-20 course as a diploma requirement.

Accelerated Sequences and Advanced Placement

The Andover curriculum offers accelerated sequences in most departments. It provides special programs in Latin, Greek, and the modern foreign languages, designed to cover four years' work in three—or five years' work in four. The programs are open, on invitation of the departments, to especially able and ambitious students.

A large number of Phillips Academy students take College Board Advanced Placement Tests in May to establish advanced placement in college courses or credit toward the college degree.

Advanced Placement Examinations are offered in: American History, Art History, Biology, Chemistry, Computer Science, English, European History, French, German, Latin, Mathematics, Music, Physics, Spanish, and Studio Art (portfolio).

Independent Projects

With the approval of the Dean of Studies and in accordance with requirements established by the Faculty, a student may substitute independent work for some portion of the normal course load. An independent project may replace a given course for up to three trimesters of a student's stay at the Academy, or may replace all courses during

a given trimester. In either case, the work is done under the supervision of a member of the Faculty.

Off-Campus Programs and Projects

The school offers several off-campus residential programs. The *Washington Intern Program*, in which Andover joins with Exeter, allows a group of Upper Middlers and Seniors to spend the Spring Term living together in Washington and working in the offices of U. S. Senators and Congressmen. (See *History 300*.)

Students enrolled in Spanish at the third level or higher may elect a residential Winter Term of study in Mexico. (See *Spanish 35*.)

Selected students of French may spend the Winter term in Antibes, France, attending local schools and residing with a family in the city.

In addition to school-sponsored programs, the trimester plan provides an opportunity for individual Seniors to arrange off-campus projects related to their special interests. Some Seniors have worked as interns with officials in local government and members of the Massachusetts legislature. Others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative in the investigation of opportunities and careful planning of a course of study that will meet diploma requirements and also free a block of time during the appropriate term. Participation in any off-campus project or program must be approved by the Dean of Studies.

School Year Abroad

Students may elect to spend their Upper Middle or Senior Year studying in France or Spain with *School Year Abroad*, originated as an off-campus program by Andover, later joined as a sponsor by Exeter and St. Paul's. Students live with host families, while pursuing a course of study under the supervision of teachers from the three original sponsoring schools. Although *School Year Abroad* is now an independent program, it provides students with courses that earn full academic credit at Andover and with the experience of immersion in a foreign culture. Students wishing to participate should consult their Academic Advisor and the *School Year Abroad* office (located in Samuel Phillips Hall on the

Phillips Academy campus) for guidance in the selection of courses for the years prior to and following the year abroad.

The Mountain School Program

The Mountain School Program of Milton Academy is a semester-long program for eleventh graders which offers students the opportunity to enjoy a different living and learning experience on a 300 acre farm in Vermont. Phillips Academy students may participate Fall Term only. Students will continue their academic courses in addition to activities which will emphasize practical skills and crafts. Students will work on The Mountain School farm which supplies most of the food and heat for the school.

Summer Session

The *Andover Summer Session* is a six-week academic enrichment program for boys and girls of high school age. Students who wish to receive Phillips Academy credit for courses taken at the *Andover Summer Session* must receive prior approval from the chairman of the department involved.

Planning a Program of Studies at Andover

The following is designed to help Andover students and their parents to understand the curriculum, and to show the major decisions, and their consequences, which face students at each stage of the four-year academic program.

Workload

All new students are advised to carry only a normal program of five courses each term in the Junior, Lower Middle, and Upper Middle years. The requirement for the Senior year is four courses or the equivalent of the fourth course—that is, independent work equivalent to a course. Upper Middlers and Seniors may elect to adjust their workload by carrying four courses or five courses in any trimester during their last two years as long as the total for the two years comes to twenty-seven trimester units.

Academic Advising

Each student has an Academic Advisor; this member of the Faculty is responsible for counseling the student in the planning of his or her course of study at Andover. The Advisor meets with the student during the Orientation period prior to the opening of school in September to review the course selections which the student has made during the previous Summer or Spring. The Advisor must approve the selections for the Fall Trimester at this time, and those for the Winter and Spring Trimesters, respectively, during conferences held later in the year.

Within the diploma requirements, programs of study are determined by the student's long-range needs and aspirations—insofar as these can be identified. These needs may include college and career plans, strengths and weaknesses as revealed by previous performance and aptitude tests, and character and personal development.

In addition to the Academic Advisor, the House Counselor or Day Student Counselor must also approve the student's course selection for each trimester. From time to time during the academic year, the Counselor will report to parents concerning the student's growth and progress. Late each spring students in the three lower classes and their respective Academic Advisors will prepare a selection of courses for the coming year; a copy of this selection will be mailed to parents in June.

Although the student is ultimately responsible for the selection of his courses, the Academic Advisor will welcome any information and suggestions that parents may wish to offer.

Arena Day

In general, students register for their courses and selections in an arena setting before each term. Following meetings with their Academic Advisors, students make certain that the desired courses have sections scheduled that permit a conflict-free, workable daily program. Entrance into the arena is by classes and in numerical order according to a randomly chosen, pre-assigned number. Students are advised to have alternate selections in mind in the event that some of the desired sections are full; enrollment is on a first-come, first-served basis. There is some modification of the Arena Day pro-

cess for Juniors and new Lowerers at the beginning of the Fall Trimester.

Diploma Requirements

The basic diploma requirement is the satisfactory completion of a four-year secondary school program, of which at least three trimesters must be at Andover; the student must be in good standing (not on Probation or under Suspension) at the time of graduation. A student who has been dismissed is ineligible for a diploma unless readmitted.

A student's required program normally includes nine trimester units of a foreign language, eight of mathematics, three trimester units of United States History, plus an additional trimester course in history taken at the Upper Middle or Senior level, a full-year course in a laboratory science, one trimester of art (usually *Visual Studies-Art 10*), one trimester of music (usually *The Nature of Music-Music 20*), and nine of English, these to include *English 10* (for ALL entering Juniors), a year-long course of competence in writing and reading and a three-trimester sequence of general literature. In order to be eligible for a diploma all students must satisfy the swim requirement of the Department of Athletics. Certain diploma requirements vary with the class level at which the student enters Phillips Academy. Entering Juniors and Lower Middlers must pass a trimester course in physical education in addition to required athletics, and, beginning in September 1983, must pass, prior to graduation, at least one trimester course offered by the Department of Philosophy and Religious Studies. Entering Upper Middlers need take only one trimester of either art or music at the Academy. Entering Seniors are not required to take either art or music. Some modifications of the language requirement are made for entering Upper Middlers and Seniors. Entering Seniors with no previous foreign language experience must pass a 10-20 course in a foreign language. A Senior must pass a minimum of twelve graded trimester courses during the Senior year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Independent Projects are counted as graded courses.

Credits (trimester units) required for diploma are:

For Entering Juniors 54

For Entering Lowers 51

For Entering Uppers 48

For Entering Seniors 48

Newly Admitted Students

Students entering for their first year are sent placement material, including some forms for present teachers to complete and a self-administered diagnostic test in elementary algebra. These items are used by the Academy to aid in proper placement or recommendation of course levels. New students are also asked to complete to the best of their ability a Course Selection form, indicating the courses that they wish to take during the coming year. Although the placement material may alter somewhat a student's preliminary selections, it is helpful, for planning purposes, to know the levels that each student thinks he or she is ready to enter.

The Main Choices at Each Stage of a Four-Year Program

While a student's program of studies is adapted each year to his changing situation, the *future consequences* of each course should be noted, for certain choices in one year open the way to later options and may close the door to others.

JUNIOR YEAR

Each trimester a Junior must take five courses, only one of which may be a Pass/Fail course. Students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring.

In selecting courses, students are reminded to check the diploma requirements. A Junior's program should resemble the following outline:

1. Math—begin sequence (usually *Mathematics 10 or 11*);
2. Foreign Language—begin sequence (usually a year-long course at the 10-level);
3. English—*English 10*
4. Elective [Art, Social Science, History, another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]
5. Elective

LOWER MIDDLE YEAR

Each trimester a Lower Middler must take five courses, only one of which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. A few students take the CEEB Achievement Tests during the Lower Middle year. In selecting courses, students are reminded to check the diploma requirements. A Lower's program should resemble the following outline:

New Students

1. Math—(usually *Mathematics 19 or Mathematics 20*);
2. Foreign Language—enter the sequence by placement of the department;
3. English—enter sequence (*Competence*);
4. Elective [Art, Classics, History, another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]
5. Elective

Returning Students

1. Math—continue the sequence (usually *Mathematics 20 (T2), 32*);
2. Foreign Language—continue the sequence;
3. English—continue sequence (*Competence*);
4. Elective [Art, Classics, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Theatre, Dance.]
5. Elective

N.B.

Students planning to be off-campus for a term (e.g., *Term in Mexico, Washington Intern Program*, etc.) should make sure they have no year-long courses during that year. Students wishing to participate in the *School Year Abroad Program* during their Upper Middle year should discuss these plans with their Academic Advisor and seek guidance for the selection of courses for the Lower Middle Year. Participation in any off-campus project or program must be approved by the Dean of Studies.

UPPER MIDDLE YEAR

During the Upper Middle and the Senior Years, a student must accumulate a total of 27 units in blocks of four or five courses per trimester. A Pass

/Fail course may be elected as a fifth course only.

New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many students take the CEEB Preliminary Scholastic Aptitude Tests in the Fall; all take the CEEB Scholastic Aptitude Tests in the Winter; and many take the CEEB Achievement Tests in the Spring of their Upper Middle year. Some also take the CEEB Advanced Placement Tests in the Spring of their Upper Middle Year. As a matter of general policy Academic Advisors encourage "depth" in the selection of courses for the Upper Middle Year. Many students satisfy their United States History requirement during their Upper Year. In selecting courses students are reminded to check the diploma requirements. An Upper's program should resemble the following outline:

New Students

1. Math—(usually *Mathematics 31* or *35*);
2. Foreign Language—enter the sequence by placement of the department;
3. English—begin sequence (*Competence*);
4. Elective [Art, Classics, another English,
5. Elective [History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

Returning Students

1. Math—continue the sequence (usually *Mathematics 35 (T2)*);
2. Foreign Language—continue the sequence;
3. English—continue the sequence (usually *Lit B (T2)*, *Lit C*);
4. History—usually *History 300 (T2)*, *301 (The United States)*;
5. Elective [Art, Classics, another English, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

N.B.

Students wishing to take an *Off-Campus Independent Project* for a trimester of their Senior Year must have no year-long courses during their Senior Year. Participation in any off-campus project or program must be approved by the Dean of Studies.

SENIOR YEAR

During the Upper Middle Year and the Senior Year, a student must accumulate a total of 27 trimester units in blocks of four or five courses per trimester. A Pass/Fail course may be elected only as a fifth course; however, an Independent Project, though marked on a Pass/Fail basis, is counted as a graded course.

A Senior must *pass* a minimum of twelve graded trimester courses during the Senior Year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Many Seniors retake the CEEB Scholastic Aptitude Tests in December and the CEEB Achievement Tests in January, and take the CEEB Advanced Placement Tests in May. In selecting courses students are reminded to check the diploma requirements. A Senior's program should resemble the following outline:

New Students

1. Math—enter the sequence by placement of the department; if the requirement is not yet satisfied enter *Mathematics 40*;
2. Foreign Language—enter the sequence by placement of the department if the requirement is not satisfied;
3. English—usually *English 300-12*;
4. Elective [Art, Classics, another English,
5. Elective [History, another Math, a 10-20 Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

Returning Students

Usually most diploma requirements are satisfied. Careful selection of electives for continued depth in the student's chosen areas is encouraged.

Transferring and Dropping Courses

To transfer or drop a course, a student must obtain an official transfer slip from his or her Academic Advisor. This slip is then taken *as soon as possible* to the Scheduling Officer in George Washington Hall. Transfers into term-contained courses must take place during the first six calendar class days of the term. No course may be dropped after the end of the fourth week of classes of any term. Students wishing to drop year-long or T2 courses prior to the normal end of the course, and after the first six calendar class days of the course, may do so only

by gaining the approval of a group of five: the Department Chairman, the Dean of Studies, the student's House Counselor, Academic Advisor, and Instructor. Credit is granted at the discretion of the Department Chairman and only if the student is passing the course at the time it is dropped and only for that portion completed. Year-long and T2 courses are considered as long-term commitments.

Attendance

Students are expected to attend all academic classes.

Instructors, if approached in advance, are permitted (but not required) to excuse students from a class meeting if the absence from that meeting will not add to weekend time. Only Cluster Deans may give permission to extend weekend time, and they may do so without consulting Instructors.

Failed Courses

In most cases, continuing students may attempt to receive credit for a failed course by taking a make-up examination. Spring Term Senior Failures may be made up only following Commencement.

College Entrance Examination Board Test Dates

Tests will be held on campus in 1984-85 as follows:

October 20	PSAT/NMSQT (<i>Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test</i>)
November 3	SAT/ACH
December 1	SAT/ACH
January 26	SAT/ACH
May 4	SAT/ACH
June 1	SAT/ACH
May 6-17	AP (<i>Advanced Placement Examinations</i>)

course, that is term-contained, but one that may be taken only once. (Example: *Music 20-2*). The designations 1, 2, and 3 indicate the trimester during which the course is offered: 1 = Fall; 2 = Winter; 3 = Spring. Some courses require a two-term commitment; they are indicated by a "(T2)" following the course name (Example: *Physics 52-12 Advanced Physics (T2)*). Check carefully each course description for any other limitations: Prerequisites, permission of instructor or department chairman required, etc.

Immediately below each course number is a 4-digit number in parentheses. This identification number (often referred to as the "computer number") is used for data processing files and is required when a student registers for courses. The final digit of the computer number has roughly the same meaning as the last digit of the course number:

<i>Final Digit:</i>	<i>Indicates:</i>
0	Year-long course
1	Course offered in Fall Trimester
2	Course offered in Winter Trimester
3	Course offered in Spring Trimester
4	T2 course offered in Fall and Winter
5	T2 course offered in Winter and Spring

Key to Course Designation

A course number ending in "0" denotes a year long course (Example: *Math 10-0*). A number ending "123" indicates that the course is term-contained, but sequential, and may be taken for one, two, or three terms (Example: *Art 26-123*). A number ending in a single digit "1", "2", or "3" indicates a

Course Descriptions

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers a term-contained course as an elective.

25—3 Archaeology (Not offered 1984-85.)

Four prepared classes. Open to Upper Middlers and Seniors. Limit 15 students. The course explores the methods archaeologists use to reconstruct pre-historic societies and to test general statements concerning how and why these societies came to be the way they were. In doing this, several major transformations in human society are considered, beginning with the society of the earliest men, and ending with the first civilizations. Lecture and class discussions are supplemented by visual aids and work with archaeological specimens. A brief excavation may be conducted locally.

Art

The diploma requirement in Art is as follows: entering Juniors and Lowers must take a trimester course in a Studio Art; an entering Upper must take a trimester course in a Studio Art or Music at the Academy; neither a Pass/Fail course nor an Art History Course is accepted as fulfilling the requirement. The basic course, Visual Studies, covers a broad range of material, is open to students of all abilities and experience, and is a prerequisite to almost all elective courses in Art. Exemption from this prerequisite is granted only on the basis of a portfolio of work judged satisfactory by the Chairman of the Department in collaboration with the teacher of the course which the student desires to enter. An acceptable portfolio should contain examples of two-dimensional work, three-dimensional work (slides or photographs are acceptable), and photography.

The College Entrance Examination Board offers students the opportunity to gain Advanced Placement in Studio Art in many colleges and Art Schools, thus enabling a student to by-pass basic design courses. Students must submit a portfolio of slides and original work to Princeton in May. Students interested in Advanced Placement

should enroll in *Art 315-1* and two subsequent terms in Art.

Students wishing to apply for an independent project in photography will not be eligible until they have taken *Art 12*, *Art 26*, and two terms of *Art 306*.

With the exception of *Art 40* and *41*, no Art course, if failed, can be made up by examination.

Students should expect to help pay for art materials.

Cameras are available for loan to scholarship students taking photography.

INTRODUCTORY STUDIO COURSES

10—1 Visual Studies

(0101) Five prepared class periods. Not recommended for Juniors. In its emphasis on visual observation, interpretation, and organization, the basic course is designed to provide an understanding of how visual information is made and transmitted. Along with discussion of design problems, the student receives experience in photography, drawing, two-dimensional design, and three-dimensional construction. Previous experience in art is not required.

11—12 Visual Studies for Juniors (T2) (a two-term commitment)

(0114) Four prepared periods. Strongly recommended for Juniors. This course introduces students to the language of vision through drawing, photography, color structure, and two and three dimensional design. Studio projects are coordinated with seminars in the Addison Gallery where students see and handle original works of art that instruct and clarify their own art making activity. The course will fulfill the diploma requirement in art and will serve as the equivalent of *Art 10* as a prerequisite for other Art courses.

12—1 Introductory Photography

(0121) **Prerequisite:** *Visual Studies*. An introduction to basic out-of-doors photography, the course covers fundamentals of exposure, developing and printmaking. A camera (35 mm. or 2 1/4) with manually controlled speed, aperture and focus is required; a light meter is not necessary. (Scholarship students may borrow cameras from the school.) Emphasis is on both dark-room technique and aesthetic quality. This course may

be bypassed by students with previous experience through the presentation of a portfolio. Classes meet twice a week with six hours of preparation and weekly conferences with the teacher.

14—1 Introductory Ceramics

(0141) Four classes per week plus an evening studio. Limit of ten students. Basic techniques

14—2 of hand-building, wheel-throwing, and glazing. Emphasis on the sculptural as well as

14—3 the functional possibilities of clay. At least

(0143) one raku firing each term, or a similar special

project. No prerequisites, and does not fulfill the diploma requirement.

15—23 Introductory Design

(0152) **Prerequisite:** *Visual Studies* (Art 10 or Art 11).

(0153) A course designed for students who, having completed Art 10 or Art 11 would like to continue in an Art course less specialized than the other

electives available in Art. This course continues the exploration of visual communication begun in *Visual Studies*, using a variety of media. Students work in several different forms of two- and three-dimensional art, exploring their relationships and developing some familiarity with the concepts dealt with in more specialized courses. Not open to Juniors.

INTERMEDIATE STUDIO COURSES

Unless otherwise noted, the intermediate courses consist of four prepared classes each week. *Visual Studies* (Art 10 or Art 11) is a prerequisite for all intermediate courses. Any of these courses may be taken more than once to increase proficiency, as the courses are designed to deal with individual needs.

20—1 Drawing and Two-Dimensional Design

(0201) **Prerequisite:** *Visual Studies* (Art 10). A course designed to develop drawing and two-dimensional composition skills. Drawing includes: life

drawing, still life, and mono-printing. Two-dimensional design will deal with the organization of representational images, color, painting and collage. Continuation in *Drawing* (Art 20-23) or *Two Dimensional Design* (Art 23-23) in Winter or Spring is recommended. (Mr. Shertzer and Ms. Veenema)

20—23 Drawing

(0202) **Prerequisite:** *Visual Studies* (Art 10). A course

(0203) designed to develop observation and draw-

ing skills in several media, based on the assumption that drawing is an end in itself as well as a skill basic to other media. Included: one life-drawing session each week. (Ms. Veenema and Mr. McMurray)

23—23 Two-Dimensional Design

(0232) **Prerequisite:** *Visual Studies* (Art 10). The

(0233) course deals with one's ability to manipulate those elements most associated with the picture

plane: color, line, shape, texture, and composition of flat materials. Work includes: 1) color—free studies and collages dealing with the structural and expressive nature of color; 2) drawing—exercises using pencil, pen, and brush, figure and landscape drawing; and 3) figure-ground—expanding the structural and illusionary aspects of figure-ground as an end in itself and as a basis for graphic and advertising design. (Mr. Shertzer)

24—23 Three-Dimensional Design (T2) (a two-term commitment)

Prerequisite: *Visual Studies* (Art 10). Industry, architecture and the crafts have required the development of professional design disciplines distinct from the fine arts. Joining aesthetic and scientific principles with knowledge of manufacturing and construction techniques, designing requires diverse skills and the ability to combine them. This course identifies some basic areas of concern—equilibrium, economy, function, scale—within an ecological frame of reference. In what ways have designers imitated nature? In what ways have they set themselves and their work against nature? How do economic, social, political and philosophical considerations influence design? Studio problems in design and construction will draw on the student's ability to learn and apply problem-solving techniques creatively; discussion and written exercises will ask the student to think about design as it defines the human enterprise. An introductory course in physics, chemistry or biology, taken previously or concurrently, will be helpful. This course provides a basis for further study in engineering, architecture or those arts and crafts which, like sculpture or furniture design, involve construction. (Mr. Lloyd)

26—123 Intermediate Photography

(0261) **Prerequisite:** Art 12. An extension of Intro-

(0262) ductory Photography, the course goes deeper

(0263) into technical proficiency and aesthetic

quality. Technical aspects include metering techniques, black and white filters, exposure and printing contrast controls, various developing styles and darkroom deviations. A camera and light meter are required. The student will be exposed to the works of var-

ious photographers so that he may gain a better sense of his own photographic style and identity. Classes meet twice a week with six hours of preparation and weekly conferences with the teacher.

27—13 Animation

(0271) **Prerequisite:** *Visual Studies (Art 10)*. An introduction to the art of illusion of motion through shooting still images frame by frame with 16mm sound motion picture film, with emphasis on the relationship to the sound track in structuring the finished product. Students may work in computer animation. (Mr. McMurray)

HISTORY OF ART COURSES

40—1 History of Art: Painting and Sculpture

(0401) Four prepared class periods. For Uppers and Seniors. Although a survey of Western Art from the cave painter to contemporary, the course examines four present-day directions by studying the historical styles as roots leading up to our time, with an emphasis on the 20th Century. (Mr. Bensley)

41—2 History of Art: Architecture

(0412) Four prepared class periods. For Uppers and Seniors. A survey of architecture and engineering from priestly civilizations to the present, the course emphasizes the architectural style as an expressive outgrowth of the culture that produced it. Combined with *Art 40-1*, this course should prepare students for the Advanced Placement Examination in Art History. (Mr. Bensley)

ADVANCED STUDIO COURSES

Visual Studies (Art 10 or 11) is a **prerequisite** for all advanced courses. These courses may be taken more than once. Unless otherwise noted, Advanced Studio courses meet four hours a week with four more hours required in the studio.

300—123 Graphics and Photography

(0701) **Prerequisite:** *Visual Studies (Art 10)*. Applying photography to graphic arts, particularly (0702) through photo-silkscreen, photo-etching, and photo-lithography. Individual experimentation is emphasized in an attempt to carry the expressive force of photography beyond darkroom techniques. (Mr. McMurray)

302—123 Painting

(0721) **Prerequisite:** *Visual Studies (Art 10)*. An introduction to the basic elements and techniques of painting in oils. Specific problems are assigned to study the fundamentals of color, composition and space in painting, as well as to encourage the student's individual expression. Class critiques and discussions, slides, reproductions, films and occasional field trips are also part of the course. Previous experience is helpful but not necessary; students are encouraged to sign up for the full year if possible.

303—23 Filmmaking

(0732) **Prerequisite:** *Visual Studies (Art 10)*. This course combines viewing theatrical, documentary, and art films for discussion and criticism with the production of individual or group student films in super-8. Course work will include developing film ideas, script-writing, shooting, cutting, editing, and class critiques. (Mr. Sheldon)

304—123 Advanced Ceramics

(0741) **Prerequisite:** *Visual Studies (Art 10)*. For those who are seriously interested in the total operation from design to execution. Hand-building, wheel-throwing, glazemaking (and some chemical analysis), responsibility for loading and firing electric, gas, raku, and salt kilns. Assigned reading and occasional field trips. Previous experience in clay is desirable. (Mrs. Bensley)

305—23 Printmaking

(0752) **Prerequisite:** *Visual Studies (Art 10)*. This course aims to give a student knowledge of different drawing techniques using printmaking media. Students work with metal plate etching and dry point techniques, collagraph, linoleum or wood block printing, and plate lithography. Printmaking media allows students to see the successive conceptual stages an artist goes through in developing an image and encourages them to look at the many possible forms their images could take rather than focusing on one final product. (Mrs. Veenema)

306 Advanced Photography

Prerequisites: *Introductory Photography (Art 12)* and *Intermediate Photography (Art 26)*.

306-I-13

(0761) Photojournalism. A photograph is a multi-dimensional experience. It can serve to recall persons or events; it can inform, inspire, and raise questions. It is a way of sharing an ex-

perience and one's relationship to it. The subject of this course is taking photographs that are deeply and personally felt and which, at the same time, can communicate to a wide audience. The commentary and images of several celebrated photographers will be presented for discussion. Projects will include individual photographs, essays, picture stories, journals, biographies, etc. While independent work is expected, some assignments will be given. (Mr. Wicks)

306-II-1 Large Format Photography. The special qualities of the large camera open up a new world of image making which alters the relationship of photographer to subject and creates options different from the smaller formats. View camera swings and tilts, perspective and depth of field control, sheet film processing, advanced metering and exposure methods, and techniques of the fine photographic print are covered. Students may work in color or black and white. A survey of the aesthetic and stylistic development of photography in the nineteenth and twentieth centuries is taught. Students explore the many possible approaches to their own photography in this historical context. Extensive use is made of the Addison Gallery's collection of original photographs. Large format cameras are provided. (Mr. Sheldon)

306-III-2 Studio Photography. Concentrating on portraiture and fashion photography, studio strobes are used to achieve controlled lighting. Through various darkroom techniques and manipulation, along with individual experimentation, an attempt will be made to express personal ideas. Utilizing professional models from Boston agencies, the course is an introduction to commercial photography. (Mr. Bensley)

306-IV-3 Photoillustration. Communication of thoughts, feelings, and dreams in an imaginative and personal manner is the main goal of photoillustration. Through various darkroom techniques and manipulation, along with individual experimentation, an attempt will be made to express personal ideas. Initial projects will be assigned to enhance experimentation and problem-solving, followed by independent work to be presented sequentially in book format. The course includes group critiques and discussion of works by several photographers. (Mr. Bensley)

308-123 Sculpture
(0881) **Prerequisite:** *Visual Studies (Art 10)*. Offers
(0882) an opportunity to work in practically every
(0883) material available to the sculptor today, in-

cluding wood, stone, metal, plastics, plaster, and others. It is therefore possible for students to develop into sculpture concepts discovered in *Visual Studies (Art 10)* or *Three-Dimensional Design (Art 24)* as well as ideas drawn from their own experience. Some outstanding work of recent classes includes the "avocado" by Seymour House '73, a thirty-foot welded construction which is now a permanent addition to the Underwood courtyard. Individual criticism is stressed. (Mr. Shertzer)

309-3 Kinetics
(0893) **Prerequisite:** *Visual Studies (Art 10)*. A search for the aesthetics of movement. Individual inventiveness is stressed as students pursue projects directed toward devices that produce implied or real motion. Self-perpetuated problem-solving situations become one of the prime values and objectives of the course. Projects range from simple mobiles and mechanical sculptures to computer graphics. (Mr. McMurray)

310-123 Architecture
(0901) **Prerequisite:** *Visual Studies (Art 10)*. For Up-
(0902) pers and Seniors. *Three-Dimensional Design*
(0903) (*Art 24*) recommended, but not required.
The design of structures for human habitation involves a variety of basic considerations. In the fall, the course will concentrate on functional analysis of sheltered spaces and their organization. The winter term will survey methods of enclosing spaces at different scales and construction techniques, including some architectural detailing. The spring term will combine knowledge gained in the previous terms in a project or projects simulating the experience of architectural practice. The course fills the needs of students who are considering architecture as a field of concentration as well as of those who desire familiarity with the basics of environmental design. Although students are encouraged to take the course for three terms, each segment is planned to accommodate enrollment for that term alone. (Mr. Lloyd)

311-3 Contemporary Communications
(0913) Four prepared class periods. The course examines some of the bases of communication between and among people. Material includes fiction, non-fiction, poetry, drama, motion pictures, and the visual arts. **Prerequisites:** Successful completion of a course in art, music, or theatre. The course engages in group projects aimed at public presentation. (Mr. Owen, Mr. Lloyd)

314—3 Calligraphy: The Art of Lettering by Hand

(0943) **Prerequisite:** *Visual Studies (Art 10)*. Four prepared class periods. A course designed to develop basic techniques of fine hand lettering beginning with Roman capitals and tracing the historical developments of letter construction, integrating form and function. Practical applications can range from simple matter quotations to illuminated manuscript work. Applications of computer graphics are explored. (Mrs. Quattlebaum)

315—1 Advanced Placement in Studio Art

(0951) **Prerequisite:** *Visual Studies (Art 10 or Art 11)* and two art courses. For Seniors who have taken at least two art courses beyond Visual Studies, and can be recommended by the teachers of those courses. This course is a seminar run via weekly critique sessions with instructor, and in which each student is expected to do at least nine hours of outside, independent work in preparation of her or his portfolio for Advanced Placement or for other use. A student enrolled in this course should plan to take at least one art course or project in Winter and Spring Terms. (Ms. Veenema)

The Classics

The foreign language diploma requirement is competence at the third-year level of a modern or ancient language. Such competence in Latin or Greek is usually established by completing the ninth trimester. Able students may fulfill the requirement at the end of the eighth, or even the seventh, trimester by passing a special examination set by the department.

Two sequences are offered in Latin, the regular sequence of *Latin 10, 20, 30, 40, and 50*, and an accelerated sequence of *Latin 10, 25, 35, and 50*. In Greek the regular sequence is *Greek 10, 20, 30, and 40*, though Upper Middlers wishing to accelerate may want to consider *Greek 10-20* followed by *Greek 30*.

Through the study of Greek and Latin the Department of Classics offers students a direct entry into Greek literature, which is still unsurpassed in excellence, and into Latin, which, as the universal language of church, court, and scholars throughout the formative years of modern Europe, can rightly be termed the mother tongue of Western Civilization, and the surest index to its meaning.

Students have traditionally studied Latin before going on to the study of Greek. However, Greek is equally appropriate as a first language since it is not more difficult than Latin. The Greek alphabet is easily mastered in the first few class meetings, and students quickly discover that the Greek language has poetic and expressive qualities which stimulate the imagination and illuminate man's political and intellectual development.

In addition to language courses, there are survey courses which require no knowledge of Greek and Latin. Through them the Department makes available to all Andover students a broad introduction to Classical civilization: history, literature, mythology, epic, and etymology.

GREEK COURSES

10—0 Greek, First Level

(5010) Five prepared class periods. The course introduces the student directly to the Classical Greek of Periclean Athens through a series of readings which present not only the vocabulary, forms and syntax of the language but also the thoughts, feelings and actions that exemplify the Greek genius. Though preliminary selections are necessarily simplified, within the first year students are reading excerpts from Plato, Aristophanes, Euripides and Homer.

10-20—0 Greek, First and Second Level, Accelerated

(5020) Five prepared class periods. The course is open to Seniors and Uppers. It covers in one year the essential material of *Greek 10* and *Greek 20*: basic forms and structure, along with ample selected readings from Xenophon and Plato, as an introduction to Greek literature.

13—1 Introduction to Greek

(5031) Four prepared class periods. The course is for students whose curiosity for the Greek language and literature has been aroused by their studies in other areas. For students who plan some day to study Russian or German, this course provides an excellent introduction into the intricacies of a highly inflected language. The student is also treated to an inside preview of a literature which, over the centuries, has provided inspiration and models for the literature of the Western World. It is a term-contained course, but students wishing to continue with Greek will have the opportunity to do so.

20—0 Greek, Second Level

- (5040) Five prepared class periods. The course continues the format of *Greek 10*, with further systematic development of reading skills and control of vocabulary, forms and syntax through the medium of more advanced selections from the Greek masterpieces, always with the purpose of understanding the spirit of the people that produced them.

30—0 Greek: Iliad and Odyssey

- (5050) Four prepared class periods. Selected books of the *Iliad* and the *Odyssey*, and sometimes a play of Euripides. Students examine the nature of tragedy, heroism, and self-discovery.

40—123 Greek: Historians, Tragedians, Lyric Poets

- (5061) Four prepared class periods. In the Fall Term ancient concepts of justice and morality are examined through the works of Herodotus and Thucydides. Human tragedy is explored in a play of Sophocles or Euripides in the Winter Term. The Spring Term is devoted to the study of emotion and self-expression in the Greek lyric poets.

LATIN COURSES**10—0 Latin, First Level**

- (5110) Five prepared class periods. The purpose of the course is to prepare students for general reading in Latin. To that end, thorough training is given in the basic vocabulary, forms and syntax of the language (including all participles, infinitives and subjunctives) along with practice in sight reading. Frequent attention is paid to the relationship of Latin to English. Surveys of Roman history and civilization provide an introduction to "the grandeur that was Rome".

10-20—0 Latin, First and Second Level, Accelerated

- (5120) Five prepared class periods. For Upper Middlers and Seniors. A year-long accelerated introductory course covering the essential elements of *Latin 10* and *Latin 20*.

13—1 Introduction to Latin

- (5141) Four prepared class periods. The course is for students seeking an introduction to the
13—2
 (5142) Latin language, or those whose studies in other languages (including English) have aroused their curiosity about the workings of languages (grammar, syntax and vocabulary). It offers special profit

and fascination to students of French, Spanish, and Italian, since it illuminates much of what they already know by acquainting them with the mother language. For students who plan some day to study Russian or German it serves as an introduction to the workings of highly inflected languages. It is a term-contained course, but students wishing to continue with Latin will have the opportunity to do so.

20—0 Latin, Second Level: Selected Prose Authors

- (5150) Five prepared class periods. During the first term, the course gives a thorough review of the fundamentals of Latin grammar and begins the reading of Caesar. Caesar's account of his campaigns gives the student insight into the problems of political ambition and international intrigue. The character values to which the Romans attributed their success are examined in readings from Nepos and Livy on the lives of ancient heroes. New students whose first-year Latin course has been less complete than *Latin 10* may be placed by the Department Chairman in a special section of *Latin 20* appropriate to their needs.

25—0 Latin, Accelerated Second Level

- (5160) Five prepared class periods. Open to students who have completed *Latin 10* with high honors and to other qualified students, at the invitation of the Department. After a thorough grammar review in the fall, the course moves through selections from Caesar in the winter and into Cicero by spring, with a sampling of the poetry of Ovid as time permits. There is practice in sight translation and prose composition. Texts are essentially the same as for *Latin 20* and *Latin 30*. Successful completion of *Latin 25* enables one to enter *Latin 35* the next fall.

30—0 Latin, Third Level: Cicero, Sallust, Vergil

- (5170) Four prepared class periods. Through the writings of Cicero and a variety of other authors, students learn to read Latin prose with increasing ease. The course presents a picture of Cicero's life and times and compares the political unrest and maneuvering of his time with that of our own. The literary importance of Cicero as the creator of a prose style which had a dominant influence on the literature of Europe for centuries is assessed. In the Spring Trimester the student is introduced to Roman poetry through readings in Vergil's *Aeneid*, Book II. The student will begin to understand how Vergil, as heir to the Homeric tradition, gave to epic and to Western poetry in the generations that followed him their definitive form. New students whose first- and second-year Latin courses have been less complete than

Latin 10 and *Latin 20* may be placed by the Department Chairman in a special section of *Latin 30* appropriate to their needs, or in *Latin 25*.

35—0 Latin, Accelerated Third Level

(5180) Five prepared class periods. Open to students who have successfully completed *Latin 25* and to other qualified students at the invitation of the Department Chairman. The course reads extensively in Vergil's *Aeneid* (Books I, II, IV and VI), covering most of the Spring Trimester's reading in *Latin 30* and the year's reading in *Latin 40*. The student thereby gains credit for the fourth-year level and is eligible both to take the Latin Advanced Placement Examination, in the spring and to enroll in *Latin 50* the next fall.

40—123 Vergil's Aeneid

(5191) Four prepared class periods. Through a thoughtful reading of Vergil's *Aeneid*, students are introduced to the great classical traditions of epic poetry. The literary form and beautiful, symbolic content of the *Aeneid* become familiar as the model and inspiration of our western poetical heritage. Homer, as Vergil's well-loved and frequently emulated model, is read in translation; the comparison and contrast of the Homeric tradition with Vergil provide a clear understanding of the Latin author's techniques and purpose. Students electing *Latin 40* all three trimesters will be well prepared to take the Latin Advanced Placement Examination, in the spring.

50—123 Livy and Tacitus; Roman Comedy; Horace and Catullus

(5201) Four prepared class periods, one unprepared period devoted to sight work. The course includes preparation for the Latin Advanced Placement Examination. In the Fall Term, selections from Livy's *Histories* give students insight into the foundations of some of the Western World's ideas of government and law. Selections from Tacitus' *Annals* are read as a contrast because of their studied depiction of human excess in tyranny and degradation. In the Winter Term, Roman comedy treats students to the bases of European high comedy and farce. In the Spring Term, the students begin to understand the Roman concepts of moderation versus excess through the writings of the poet Horace, described by a Twentieth Century psychiatrist as "a type of the perfectly integrated personality." The lyric poetry of Catullus reveals the perennial personal emotions found as well in the First Century BC as now.

CLASSICS COURSES

21—1 Classical Civilization: Greece

(5321) Four prepared class periods. For Juniors and Lower Middlers. The course surveys the achievements of the ancient Greeks from Homeric times through Alexander the Great, including their impact on later civilizations in such areas as literature, art, philosophy, drama, government and science.

22—2 Classical Civilization: Rome

(5332) Four prepared class periods. For Juniors and Lower Middlers. The course introduces students to the civilization of Rome which dominated the Western World politically for a thousand years and culturally for even longer. The developing concepts of politics, law, and empire as we know them today are discussed. The course challenges the students to consider the meaning of the Roman experience in its glorious achievement of the "Roman Peace" as well as in its "Decline and Fall."

For other courses related to Classics, please see: *Under History: Ancient History (History 330)*; *Under Interdisciplinary: Mythology; Etymology; Greek Literature in Translation*.

English

The diploma requirements in English are to establish competence in writing and reading (normally by successful completion of the *Competence Course*), and to complete the *Literature Sequence* through *Literature C*. For those entering Seniors and Post-Graduates who must take *English 300*, the requirement is reduced by the appropriate number of trimesters. (Seniors and Post-Graduates are interviewed by the Department Chairman before the start of school and in some cases these students may be exempted from *English 300* to enroll in one of the 400 or 500 level English courses.) All new Lowers and Uppers enroll in *Competence*. Students entering the Junior Class must take *English 10*. Juniors may not enroll in *Competence*.

The English Department also offers specialized courses for students who have already passed their competence and literature requirements and elect to continue studying English. Related courses, whose prerequisites vary,

are listed elsewhere in this booklet: e.g., under Performing Arts, Interdisciplinary Courses, Classics Courses, and Modern Foreign Language Courses in translation. All English courses meet for four prepared classes a week, unless the course description states otherwise.

10—0 English

(1100) This course is required for all Juniors. As a foundation for the *Literature Sequence*, the course studies a variety of literary forms and styles. Frequent writing assignments, close reading of such texts as *The Odyssey*, *Great Expectations*, *The Tempest* and regular work with journal entries prepare the student for the *Competence* course in the tenth grade.

Juniors are also eligible to enroll in *Etymology*, which is described under *Interdisciplinary*.

Normal Required Sequence (2 years) (For Lower and entering Uppers only)

	Fall	Winter	Spring
First year of sequence	← Competence →		
Second year	Lit B (T2)		Lit C

(1200) Competence Course

The course is designed to teach basic skills in reading and writing. It enables a student to achieve the competence requisite for the literature sequence and the specialized courses. The course is concerned with the recognition and use of the basic elements of a sentence, sentence patterns, punctuation, paragraph development and coherence, and the composition of unified exposition. The first term emphasizes writing paragraphs and short compositions; the second term includes multi-paragraph compositions and the documented report. The third term focuses on close and accurate reading of the short story and the poem and helps students develop the skill necessary to write about these works clearly and concisely. *Competence* also encourages the acquisition of important reading skills in conjunction with the study of writing. Passages composed by skillful writers are evaluated for organization, logic, point of view, tone, diction, transitional devices. Through the use of the summary sentence, the outline, and the summary paragraph, a student learns to reduce a passage to core ideas.

Texts: *English Competence Handbook*; *Writing: What's the Point*; *Combinations for Competence*; *The Modern Tradition*, ed. Howard; *The Norton Anthology of Poetry*.

LITERATURE SEQUENCE

Lit B (T2) (a two-term commitment)

Lit B continues the shift in emphasis, begun in the third term of *Competence*, away from basic writing training to reading and writing about literature. Here students will choose a course centered in one of three modes: Satiric, Tragic, or Mythic. Though the modes differ, the objectives of *Lit B* are common to all three: to develop the skills of literary analysis; to teach a sense of literary mode; to develop a sense of historical perspective; to teach the forms of the novel, the poem, the play; to develop a literary sensibility; and to apply analytical skills to the writing of papers.

(1224) Lit B—I (The Satiric View)

A study of verse and prose works that illustrate the nature, purposes, and techniques of satiric writings. Core Texts:

FALL TERM — *Huckleberry Finn*
Gulliver's Travels
Satire: From Aesop to Buchwald
 WINTER TERM — *Nineteen Eighty-four*
Canterbury Tales
 poetry from *Satire: From Aesop to Buchwald*

(1234) Lit B—II (The Tragic View)

This course examines the form and content of a number of works in order to identify and define elements of tragedy that are fundamental to them. The works are arranged in approximate chronological order with a balance being sought in each term among the various genres. Techniques of literary analysis and critical appraisals of the reading are stressed in frequent written assignments. Core Texts:

FALL TERM — *Oedipus Rex*
Wuthering Heights
 Selected Poetry
 Selected Plays by Ibsen
 WINTER TERM — A Novel by Thomas Hardy
Heart of Darkness

A work by Toni Morrison
Selected Poetry

(1244) **Lit B—III (The Mythic View)**

The course explores mythic elements in a wide variety of works with the aim of developing a student's ability to respond to and write about literature.

Core Texts:

FALL TERM — *The Bible* (selections)
The Oedipus Cycle
Heart of Darkness
Song of Solomon
Selected Poetry

WINTER TERM—*Moby Dick*
Ethan Frome
Huckleberry Finn
Selected Poetry

(1263) **Lit C**

An introduction to the study of Shakespeare. At least three plays will be read, one being *Hamlet*, with an emphasis upon close textual analysis.

SPECIALIZED COURSES

Specialized Courses are open to students who have successfully completed *Competence, Literature B* and *C*. Courses numbered in the 500s are more intensive and demanding than those numbered in the 300s and 400s. Each course has four prepared class periods a week, unless specifically stated otherwise. Only courses with sufficient enrollment will be given.

300—12 English

(1301) A special course for all post-graduates and
(1302) one-year Seniors. Its purpose is to provide the writing and reading skills taught in *Competence* as well as to expose students to substantial works of literature. While reading plays, poetry, short stories, or novels, students undertake intensive writing exercises and learn to write effective papers of greater length. (Mr. Miller, Mr. Smith)

401—123 Non-Fiction Writing

(1711) In this course writers will gain practice in
(1712) these non-fiction modes: personal essay,
(1713) analysis, argument, feature writing, and extended composition. There are daily writing

assignments; class work focuses on student editing. The instructors assume that students entering the course write with grammatical and rhetorical competence. Students are encouraged to submit their work for publication in newspapers and magazines. (Mr. Gould, Ms. Fan)

403—123 Introduction to Writing

(1731) An introductory course to the writing of
(1732) original stories, informal essays, and poetry.
(1733) While examining examples of the genres mentioned, the student tries all these forms.

With written permission from the department chairman, a student may take this course before he has completed the normal Competence-Literature sequence. (Mr. Owen)

404—1 Hemingway and Fitzgerald

(1741) A consideration of two modern literary contemporaries who captured their era with
404—3 equal success, but whose prose styles and
(1743) temperaments made them unlikely compatriots. Short stories and novels by both authors will be read. In addition, T.S. Eliot's *The Waste Land*, and the work of one other important writer of that time like Dos Passos or Cummings is used as comparative study. (Mr. Stableford, Mr. Thorn)

405—123 Afro-American History and Literature

(1751) A survey of Afro-Americans' experience and
(1752) their literary response to it from the apprehension of their ancestors in Africa to the present. Each student will complete a project that will span her or his enrollment in the course. These projects may be comparative analyses of the Afro-American experience and that of another racial or ethnic group. (Mr. Sykes)

408—123 American Writers

(1781) A thematic and comparative study of the
(1782) novel, drama, and poetry in America from
(1783) 1850 to the present. Representative authors are Hawthorne, James, Wolfe, O'Neill, Fitzgerald, Dos Passos, Hemingway, Williams, Faulkner, West, Styron, Agee, Cather, Wharton, Whitman, Frost, Cummings. (Mr. Cobb, Mr. Bardo, Ms. Thomas, Mr. Price, Mr. Smith)

500—23 James Joyce

(1802) The first term is devoted to *Dubliners*, *A Portrait of the Artist*, and *Stephen Hero*, and Eliott
(1803) mann's *James Joyce*; the second to *Ulysses* and

Finnegans Wake in part. The purpose of the course is to follow the development of Joyce's method and style and to develop the skill to read important and difficult works without the aid of study guides and other secondary material beyond the Ellmann. Although the course may be taken in either term, the student gains a better sense of Joyce's genius by enrolling for two terms. (Mr. Owen, Dr. Germain)

502—12 Irish Literature

(1821) The course will begin with a brief examination of Irish history and Celtic mythology in order to broaden our appreciation and understanding of the four major writers of the Irish Renaissance: Yeats, Joyce, Synge, and O'Casey. Throughout the term we will try to draw connections between Irish politics and literature, both during the Literary Revival and today, in Northern Ireland, where "the troubles" persist. (Ms. Bussiere)

504—123 Man and God

(1841) The course considers man's search for meaning in what frequently seems to be an inexplicable world. Readings include: *King Lear*, Shakespeare; *As I Lay Dying*, Faulkner; *Long Day's Journey into Night*, O'Neill; J.B., MacLeish; *The Fixer*, Malamud; *Crime and Punishment*, Dostoevski; *The Trial*, Kafka; *Wise Blood*, O'Connor; *Nine Stories*, Salinger; *The Birthday Party*, Pinter; *The Cocktail Party*, Eliot; *Zorba the Greek*, Kazantzakis; *The Bluest Eye*, Morrison. (Miss St. Pierre)

508—23 Directions in 20th Century Drama

(1882) The close study of significant contemporary drama. The winter term focuses on the first half of the 20th Century and plays by Shaw, Chekov, Strindberg, O'Casey, Brecht, Pirandello, and Ionesco are read; the spring term starts with Beckett, and includes plays by Williams, Bolt, Pinter, Albee, Stoppard, and Shepard. (Ms. Braverman, Mr. Owen)

509—1 Shakespeare: The Man, The Times, The Theatre, The Plays

509—3 The course focuses on six plays (representative histories, tragedies, and comedies), and the sonnets, as well as some biographical and historical readings. (Mr. Stephens)

510—123 The Short Novel

(1901) An examination of the novella, and the genre of the short story with concentration on some fifteen works of comparative literature, including, Chekov's *Ward No. 6*;

Mann's *Death In Venice*; Lawrence's *The Fox*; Tolstoy's *The Kreutzer Sonata*; James' *The Beast in the Jungle*; Stendhal's *The Cenci*; Greene's *The Third Man*; Melville's *Billy Budd*; Stevenson's *Dr. Jekyll and Mr. Hyde*. (Mr. Pepper)

512—123 Satire and Comedy

(1921) A study of both the theories and practice of satire and comedy, with emphases on the eighteenth century and the modern period. Works by authors like Pope, Swift, Sterne, Ben Jonson, Waugh, and Heller will be studied in conjunction with the visual art of Hogarth and Steinberg, and recordings of modern performers like Peter Cook, Dudley Moore, Mel Brooks, and Peter Sellers. (Mr. Regan)

513—123 Novel & Drama Seminar

(1931) The course concentrates on major works of literature since 1880, primarily on the works of Virginia Woolf, Henry James, David Storey, Franz Kafka, Flannery O'Connor, T.S. Eliot, Samuel Beckett, Eugene O'Neill, William Faulkner, Gunter Grass, Saul Bellow, Gabriel Garcia Marquez, Grace Paley, John Barth, Isaac Bashevis Singer, Robert Stone, Elie Wiesel, Harold Pinter, Bertolt Brecht, and Vladimir Nabokov. Students study the "world" of each writer and compare it with that of the others. As a basis for the comparison with the classics of the past, they also study a Greek Tragedy and *The Brothers Karamazov*. Class periods are devoted to seminar discussions (often led by students) and critiques of student writing. Students regularly stage dramatic readings, cast and performed by the class. (Mr. Wise)

514—123 Creative Writing

(1941) A writing course in poetry, short fiction and drama. Content and emphasis shall be determined by each instructor. Fall: Introduction to creative forms; Winter: Poetry, Short Fiction; Spring: Poetry, Short Fiction, Drama. (Mr. Just, Mr. Smith)

515—123 Literature of the Quest

(1951) Focusing on the ancient pattern of the journey, the thresholds crossed and the vision obtained, the course asks students to interpret elements of the quest from a variety of perspectives. In the Fall Term readings include Socrates' *Euthyphro* and *Oedipus Rex*, the Abraham cycle, Beckett's *Waiting for Godot*, and Eliot's *The Waste Land*. The Winter

Term considers the suffering encountered on the quest and explores themes from the gospel of Mark, *King Lear*, *The Great Gatsby*, Wiesel's *Night*, West's *Miss Lonelyhearts* and Flannery O'Connor's *Everything That Rises Must Converge*. The Spring Term questions the journey's end, reading the Amor and Psyche myth and *Alice in Wonderland*, comparing Jacob and Jesus and ending with two tragicomedies: *The Tempest* and *Who's Afraid of Virginia Woolf?* (Mr. Zaeder)

518—3 Spenser and Milton

(1963) Students read minor works of both authors as well as Spenser's *The Faerie Queene* (Books I-II) and Milton's *Paradise Lost*. (Mr. Kalkstein)

520—123 Images of Woman

(1971) This course will examine, through the study of literature, woman as she perceives herself
(1972) and as she is perceived by others. It will explore works by both men and women writers and will focus on the constant and the changing image of woman in different literary periods. Readings will include: *Northanger Abbey*, Austen; *Jane Eyre*, Bronte; *Hedda Gabler*, Ibsen; *Measure for Measure*, Shakespeare; *The French Lieutenant's Woman*, Fowles; *The Awakening*, Chopin; *The Mill on the Floss*, Eliot; *The Scarlet Letter*, Hawthorne; *Surfacing*, Atwood; *A Room of One's Own*, Woolf; *Diving Into The Wreck*, Rich; *Song of Solomon*, Morrison; *Tell Me a Riddle*, Olsen; *As I Lay Dying*, Faulkner. (Ms. Harper, Ms. Braverman, Ms. Dobson)

527—3 Chaucer and His Age

(1983) The sophisticated ingenuousness of the Middle Ages as seen in works by two of its greatest practitioners, Chaucer and the *Gawain*-poet. The focus of the course is a study of *The Canterbury Tales* in Middle English. *Sir Gawain and the Green Knight* will be read in translation. (Mr. Wilkin)

528—2 Wit and Poetry in the Seventeenth Century

(1992) A study of the several types of concentrated, witty poetry that dominated the early seventeenth century—the work of Donne, Jonson, Herbert, and Marvell—and of the profound effect that these poets have had on later poets like Hopkins and Eliot. Although the focus of the course is poetry, some of the background material is prose, from Elizabethan sources to the modern literary critics. (Mr. Zaeder)

The following Theatre courses, which are related to English studies, have no prerequisites: Theatre 22 (Public Speaking), Theatre 28 (Shakespearean Workshop), and Theatre 53 (Playwriting). Other courses related to English are

Art 311 (Contemporary Communications) and, in the Interdisciplinary section, a number of literature in translation courses and Basic Study Skills, Language Skills I & II, and Efficient Reading Skills.

History and the Social Sciences

To satisfy the Department's diploma requirement in 1984-85, the student must successfully complete United States history (*History 300-T2* and 301) and a fourth trimester of an additional 300-level SURVEY course. The 400-level SEMINARS are usually elected only after a 300-level SURVEY course.

However, students may satisfy the fourth-trimester requirement by taking a 400 SEMINAR in place of a 300 SURVEY if a student has had two trimesters of non-United States history or social science during the Junior/Lower years at Phillips Academy, or the equivalent in the 9th or 10th grades at another school, plus a sufficiently high score on the History Qualifying Test. The 400-level SEMINARS are open only to seniors, with exceptions made by the department chairman.

The History Qualifying Test (H.Q.T.) will be given to all Lower Middlers in the spring of 1984 and to all entering Upper Middlers, Seniors, Post-Graduates, and foreign students during the orientation period in September 1984. The purpose of the test is to place these students in the appropriate level of history study.

1)For some, the H.Q.T. indicates that the student is to begin the four-term sequence by taking *History 250*, either in the fall of 1984 or the spring 1985. The student would then complete the requirement sequence by taking *History 300 (T2)* and 301.

2)For others, the H.Q.T. indicates that the student is ready to begin the *History 300 (T2)* and 301 sequence in September 1984 (although the student may choose instead to begin the sequence in September 1985). To complete the diploma requirement, such students must take one additional 300-level SURVEY course beyond *History 301*. (The

requirement is to encourage students to branch out and study non-United States history and social science.) Students may take that additional 300-level **SURVEY** course only after completing one term of the regular *History 300 (T2)*, 301 sequence.

3) Finally, the H.Q.T. will indicate whether students who have had a U.S. history course in the 11th or 12th grade at their previous school should take a term of *History 250*, a 300-level **SURVEY** or 400-level **SEMINAR** to complete the four-term diploma requirement. Actual placement in these cases will depend on the individual's combination of previous non-United States history courses, the H.T.Q. score, and the judgment of the department chairman.

There are no required History or Social Science courses at the Junior or Lower Middle levels, but the History Department strongly *recommends* that Juniors take *History 110—Continuity and Change: An Introduction*. This course focuses on the phenomenon of change in history: why, how, and when change occurs and the ways people react. This course examines three clearly defined topics chosen from the span of human history and from all areas of the globe. Geography will receive special attention. Juniors who take *History 110* may continue the study of Continuity and Change by electing *History 120* and/or *History 130*. One day a week will be devoted to discussion of contemporary issues.

The History Department *recommends* that Lower Middlers take one term of biographical study. Students may select from *History 200*, 210, and 220 — *American and European Biography*. The Department believes these courses give the student an introduction to history through the study of great men and women.

Junior and Lower Middler courses stress the acquisition of certain fundamental skills in reading, note-taking, the definition of historical and social science terms, the use of evidence, and the writing of historical essays in preparation for upper level history and social science courses.

The courses at the 300-level, above 302, are thought of as **SURVEYS**, introductions either to non-United States areas of the world (e.g., Latin America), or to historical periods different from the

life span of the United States (e.g., the Middle Ages), or to social science disciplines other than History (e.g., Economics).

The 400-level **SEMINARS** are issue-oriented trimester courses and use both historical and social science concepts and skills. Limited to 12 students, each **SEMINAR** meets 3 times a week, and there is a greater expectation of independent reading and writing.

Washington Intern Program

The Department co-sponsors, with the Phillips Exeter Academy History Department, a special Spring Trimester (mid-March through late May) Program in Washington for Seniors taking, or who have taken, *History 300-301*, and for Uppers enrolled in *History 300-301*. The program is restricted to 15 Andover students and 15 Exeter students, competitively selected, for work as Interns in the offices of Senators and Representatives. The application process begins early in the previous Fall Trimester. Prospective applicants should avoid taking 0-year-long courses.

COURSES IN THE SOCIAL SCIENCES

- 100 **Anthropology: The Emergence of Man**
(Not offered in 1984-85.)
- 100 **Anthropology: The Emergence of Society**
(Not offered in 1984-85.)

INTRODUCTORY HISTORY COURSES

- 100 **Early American Society**
(Not offered in 1984-85.)
- 110—1 **Continuity and Change: An Introduction**
(2011) Five prepared class periods. Primarily for Juniors. An introduction to the study of history and the social sciences, this course will focus on the phenomenon of change in history: why, how, and when change occurs, and the ways in which people react to and are affected by it. To accomplish this, three significant changes in Man's history will be examined in some detail: possible topics include the evolution from hunting and gathering to agriculture and settled living in the Near East ten thousand years ago; Mohammed and the rise of Islam; and the French Revolution at the end of the 18th century. One period per week will be devoted to discussion of relevant contemporary issues. (The Department)
- 110—2
(2012)
- 110—3
(2013)

120—2 Continuity and Change: The Pre-Modern World
(2032)

Five prepared class periods. Primarily for Juniors. **Prerequisite:** *History 110*. This course will continue the theme of *History 110*, with an examination of further changes, taken from the pre-modern world. Included will be topics such as the growth of cities, the decline of the Roman Empire, and the Protestant Reformation. One period per week will be devoted to discussion of relevant contemporary issues. (The Department)

130—3 Continuity and Change: The Modern World
(2053)

Five prepared class periods. Primarily for Juniors. **Prerequisite:** *History 110*. The final course in this series continues the study of historical changes with a focus on changes that have occurred in the last two centuries: topics such as the growth of industrialism, using as evidence the textile industry in the local Merrimack Valley; Darwin and the theory of evolution; and the political transformation of China from 1911 to the present. One period per week will be devoted to discussion of relevant contemporary issues. (The Department)

200—2 European Biography I

(2102) Four prepared class periods. Open to Lower Middlers and selected Juniors. The course deals with the lives of men and women in Europe from the Middle Ages to the eighteenth century. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. (The Department)

210—3 European Biography II

(2113) Four prepared class periods. Open to Lower Middlers and selected Juniors. This course looks at the lives of both heroic and average men and women in the Europe of the 19th and early 20th century. Biography is used as an historical and national context. Biographies may include Gandhi and Lenin. (The Department)

220—1 American Biography

(2121) Four prepared class periods. For Lower Middlers and a limited number of Juniors. As a comparative study of American leaders, the course deals with the lives of men and women who made sig-

nificant contributions in several fields of endeavor. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, contemporary American eras, and biographers' methodologies are all components of this study. Course materials include selected biographies in paperbacks: *The Autobiography of Frederick Lewis Douglass*; Monica Sone, *Nisei Daughter*; Edmund Morgan, *The Birth of the Republic*. (The Department)

UNITED STATES HISTORY REQUIRED SEQUENCES

250—1 American Biography for Uppers

(2151) Four prepared class periods. For Uppers

250—3 whose H.Q.T. scores require a term of preliminary history study prior to *History 300* (2153) (T2) and 301. The primary difference between *History 250* and the other *History 200s* is that the readings in 250 are geared to older students and the subject matter is more explicitly related to preparation for *History 300* (T2) and 301. As a comparative study of American leaders, the course deals with the lives of men and women who made significant contributions in several fields of endeavor. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, contemporary American eras, and biographers' methodologies are all components of this study. Course materials include several biographies in paperbacks: Saul K. Padover, *Jefferson*; Robert V. Remini, *Andrew Jackson*; Stephen B. Oates, *The Fires of Jubilee: Nat Turner's Fierce Rebellion* (The Department)

300—12 The United States (T2) (a two-term commitment)

(2204) Four prepared class periods. For Upper Middlers and Seniors. This course, along with *History 301* and *History 250* or a 300 or 400 level history or social science course, according to placement on the H.Q.T., fulfills the four term history diploma requirement. History at the 200 level taken as a Lower does not count as one of the four term diploma requirements. The first term emphasizes three goals—a survey knowledge of American history through Reconstruction by reading a text, John A. Garraty's *The Ameri-*

can Nation; the acquisition of skills by daily exercises in reading, note-taking, and writing; and an in-depth study of American federalism through intensive focused readings and writing. The second term emphasizes American Industrialization from the post Civil War years to 1940. The threefold goals of the first term, a survey knowledge, skills, and analytical mastery of an organizing theme, continue; but the variety of readings and writings and the complexity of the materials increases. (The Department)

301—1 The United States

(2211) Four prepared class periods. For Upper

301—3 Middlers and Seniors. The focus is on twentieth century America to the present, with an emphasis on American foreign policy. In

this term the writing of a research paper represents a major part of the work. **Prerequisite:** successful completion of *History 300 (T2)*. In the fall of 1984 the *Washington Interns and Urban Studies participants of the Spring of 1984* will take *History 301-1*.

302—12 United States History for Foreign Students

(2221) Four prepared class periods. A course for students for whom English is a second language and whose H.Q.T. scores indicate

they are not ready for *History 300 (T2)* and *301*. The course will emphasize language skills important to the study of American History and the subject matter will focus on the founding of the republic, constitution building and how the American Government works, the westward movement, the Civil War and the coming of urban-industrial, multi-ethnic America. The intention of the course is to recognize the special needs of the students and to bring them to a level of achievement so they may transfer to the *300/301* sequence in the winter or spring term, if the students wish to be candidates for the diploma. (Mrs. Lloyd)

A student must have completed one trimester of *History 300* or have credit for *U.S. History* from another school before enrolling in another *300* level course.

ELECTIVE SURVEY COURSES — 300s

The courses at the *300*-level are thought of as **SURVEYS**, *introductions*, either to non-United States areas of the world, or to historical periods different from the life span of the United States, or to social science disciplines other than history.

SURVEY COURSES IN THE SOCIAL SCIENCES

310—1 Introduction to Economics

(2811) Four prepared periods. For Seniors who

310—2 have completed *History 300 (T2)* or the equivalent. This course is an introduction to

methods of economic analysis and their ap-

plication to problems which confront this country and the world. Students will examine the historical origins of economics, the underlying assumptions, and the principal critiques. (Ms. Amster, Mr. Williams, Dr. Strudwick)

315—3 History and Mathematics

(2833) Four prepared periods. **Prerequisite:** Permission of the Instructors. This course provides

an introduction to the ways of which elementary mathematics is employed in the study of history. Attention focuses on three main areas: elementary statistics and data analysis; entertaining historical controversies; and the logic of historical inquiry—that is, how to design a history research project. To accomplish these purposes, participants do assigned homework problems in mathematics and read exemplary works in the field, in order to discuss their merits and demerits. Most of the reading is from two books, Hubert M. Blalock, Jr., *Social Statistics*; and Robert P. Swierenga (ed.), *Quantifications in American History*. (Mr. Quattlebaum, Mr. Best)

325—3 Urban Studies Institute

(2843) Seniors and qualified Uppers who are not involved in year-long courses may elect for

their entire spring course program to participate in a ten-week exploration of the American city, including field work six hours each week. Lawrence, Massachusetts, its history and its present shape, its people and their special problems and opportunities, will be the focus of study, but the context will be drawn through investigation of broad historical, social, and economic issues which affect most of urban America. Lawrence has always been an immigrant city, and one-third of Lawrence's public school students are now of Hispanic background. In addition to their academic course work, Phillips seniors will explore a central aspect of urban life by serving as tutors in an intensive English language training program for a group of these Lawrence children; the tutoring program, which will be designed by Institute students and staff, will use dramatization and one-to-one tutoring to strengthen the children's oral and literary skills. Knowledge of Spanish or familiarity with theater will be useful, but not essential.

All students will take a course in Caribbean History and a course in Urban History, as well as a core course introducing developmental psychology and ethnic studies in such a way as to inform and support the fieldwork project. Students will meet periodically in evening seminars with outside speakers.

Seven to ten Phillips Academy students will be selected by interview and special application. Seven to ten students from college preparatory courses in Lawrence and Andover high schools will be selected in the same way. Apply to Susan M. Lloyd by December 1, 1984, for information and application forms. In the fall of 1985 members of the Class of 1986 who took Urban Studies the previous spring, and who have taken *History 300 (T2)*, but not *301*, will take *301*. (Mrs. Lloyd, Ms. Rodriguez-Walter, Mr. Quattlebaum)

SURVEY COURSES IN HISTORY

330—123 Ancient History

(2301) Four prepared class periods. For Upper
(2302) Middlers and Seniors. The course is concerned with Greek and Roman history from the Minoan Period to the beginning of the Medieval Period. Each term represents a coherent and independent unit. In the Fall Term the survey ends with the world empire of Alexander the Great. The Winter Term covers the period from the beginning of Rome until its transition from Republic to Empire. The Spring Term is concerned with Roman Empire and the transition from Roman to Medieval History. (Mr. Krumpe)

332—1 Social History of the Middle Ages

(2321) Four prepared class periods. For Upper Middlers and Seniors. The course starts with the reshaping of Roman laws and customs by the rapidly emerging Christian doctrine; these in turn are changed by the invasions of the Germanic peoples. Charlemagne serves as the prime illustration of this medieval combination of attitudes. As Europe moved into the Renaissance, humanism and rationalism dignified woman as the 'Lady' of courtly love; at the same time the fear of woman as the 'witch' haunted Europe. (Mrs. Clark)

334—123 Modern Europe: A Survey

(2341) Four prepared class periods. Open to Upper
(2342) Middlers and Seniors. The Fall term consists
(2343) of a background survey of the 16th, 17th, and 18th centuries, with particular emphasis on the political, economic, and intellectual revolutions that helped to mold the modern world. The focus of the

Winter Term is the period 1800-1900, with continuing attention given to the shaping of modern thought, the emergence of the nation-state, and the effects of industrialism. In the Spring Term, the course covers topics in 20th century Europe; the two World Wars, and their effect; the nature of totalitarianism; the cold war and the rise of the superpowers. Reading is from primary and secondary sources, as well as fiction. Visual materials are used where appropriate. The full year course has proven to be a good preparation for the Advanced Placement Examination in European History. (Mr. Royce,)

336 Tudor England (Not offered in 1984-85.)

337 Victorian England: England in an Age of Expansion (Not offered in 1984-1985.)

338—12 Modern Russia: History and Literature This

(2381) course, for Seniors only, examines the past
(2382) 150 years of Russian history and culture in somewhat greater depth than is possible in the one-term course (*History 339*). Though either term may be taken alone, students are urged to treat it as a two-term commitment. The first term is devoted to Imperial Russian history and culture, with an examination both of Tsarist institutions and the growing revolutionary movement. The second term is devoted to Soviet Russia since 1917; the course concludes with a close look at the U.S.S.R. today and its prospects for the future. Considerable attention is given to the study of literature. From the days of Pushkin in the early 19th century, Russian writers have been viewed by the government with fear and suspicion. This is because, despite police harassment, and censorship, they have continued to write fearlessly about the most pressing issues of their times. As the course examines the significant events and ideas of modern Russian, it also examines the reflection of these events and ideas in the fiction and memoirs of such authors as (in the Fall Term) Pushkin, Gogol, Turgenyev, Dostoevsky, Tolstoy, Chekhov, and Gorky, and (in the Winter Term) Mayakovsky, Zamiatin, Babel, Olesha, Solzhenitsyn, and writers of the contemporary underground press known as *samizdat*. (Mrs. Powell and Mr. Richards)

339—3 The Soviet Union

(2393) Four prepared class periods. Open to Upper Middlers and Seniors. After an initial examination of Russia's medieval and early modern background, the course focuses on the past hundred years of Russian history, with a careful study of the revolutionary changes which have transformed that country internally and created one of the great powers of the contemporary

world. Although the general orientation is chronological, the course focuses on specific topics of particular significance: the tension between East and West; the rise of the intelligentsia; Lenin and the Bolshevik Party; the Stalinist totalitarian system; Soviet foreign policy; the contemporary Russian mind. Emphasis is placed on political affairs and especially the Revolution of 1917, but considerable attention is also given to economic, social, and cultural matters. Reading is from a wide variety of sources, both primary and secondary, and also works of fiction. Visual materials, principally films, are also used. (Mr. Richards)

See also Russian 13 in the Modern Foreign Language section.

340—13 Modern China

(2401) Four prepared class periods. For Upper

(2403) Middlers and Seniors. After an introduction to traditional Chinese thought and institu-

tions, the course will concentrate on events since 1800 in China. There will be much emphasis on China's response to the West, on economic, intellectual and political developments during the nineteenth and twentieth centuries. The emphasis will be on political developments in the fall, and on art, literature and philosophy in the spring. The classes will include both lecture and discussion.

342—2 Modern Japan

(2422) Four prepared class periods. For Upper Middlers and Seniors. After an introduction

to traditional thought and feudal social structure in Japan, the course will move to a closer look at ideas, events and developments since 1800. An attempt will be made to understand the unique way in which Japan responded to the challenge of the West. Readings will be in historical texts, impressions of contemporary observers, sociological descriptions and literature, with a special effort to understand the outstanding features of Japanese culture, politics and economics through analysis and discussion.

344—2 Africa and the World

(2442) This course will focus on contemporary issues facing the new nations of Africa, based

on an historical analysis of the emergence of Africa from the colonial period. Political and economic development of these countries, the relations between developed and developing states, the emergence of majority rule in Southern Africa, and the role of Africa in the United Nations will be studied. Readings will include analyses of the issues African nations confront in the modern world,

novels about Africa, and speeches and articles by African statesmen. (Mr. McNemar)

346—1 The Middle East

(2461) Four prepared class periods. For Upper Middlers and Seniors. Few if any regions of

the world claim a more compelling interest than the Middle East. From its ancient site of half the earth's cultural antecedents, birthplace of three world religions, landbridge of three continents, eternal East-West corridor, and ceaseless crossroads of conquerors, pilgrims, and tradesmen, the Middle East derives a distinctive character of its own. This course traces the region's history from the advent and spread of Islam through the Ottoman and Safavid empires to western imperialism and the present situation. (Mr. Bunnell)

348—12 Latin American Studies

(2481) Four prepared class periods. For Upper

(2482) Middlers and Seniors. The History and Spanish Departments offer this interdis-

ciplinary course to provide an analysis of social and political structures through the study of their historical and cultural development. The course will give special attention to current developments and United States policies towards these countries. The fall focuses on Mexico; the winter, on Central America; and the spring, on the Caribbean. (The spring is reserved for students in the Urban Studies Institute.) (Ms. Rodriguez-Walter)

ELECTIVE SEMINAR COURSES — 400s

The 400-level SEMINAR electives, for Seniors (with exceptions made by the department chairman), will be issue-oriented, trimester courses and will use both historical and social science concepts and skills. To make possible effective discussion the SEMINARS will be limited to 12 students; each SEMINAR will meet three hours a week; and, there will be a greater expectation of independent reading and writing. *Reminder*, a student must have completed (1) one trimester of a 300-level SURVEY course beyond U.S. History, OR (2) two trimesters of non-U.S. History or Social Science in the 9th or 10th grades and have a sufficiently high score on the History Qualifying Test, in order to enroll in a 400-level SEMINAR.

SEMINARS IN SOCIAL SCIENCES

410—1 The Modern American Presidency

(2921) This seminar explores the historical development and institutional structure of the American presidency. Presidential power, the executive's working relationship with the other branches of government, presidential personality and his popular appeal, and the historic growth of the "imperial presidency" are topics covered in this course. The course consists of class discussions, lectures, exams, and a seminar paper. The readings are drawn from: Richard Neustadt, *Presidential Power*; James Barber, *Presidential Character*; Arthur M. Schlesinger, Jr., *The Imperial Presidency*; and J. Anthony Lukas, *Nightmare*. (Ms. Dalton)

415—2 American Race Relations

(2932) This seminar investigates the development of racial thoughts and feelings in the United States, and shows how such attitudes have taken social and legal form. We begin with a brief search for the origins of colonial racism, and then contrast patterns of antebellum slavery in the South with antislavery movements and antiblack restrictions in the North. After an examination of the role of blacks during the nation's civil war and reconstruction, we consider the causes and consequences of nativist moves to disfranchise and ostracize racial minorities in this century. Recent issues of civil and economic rights—how to reconcile assimilation with separation, Birmingham with Boston, *Brown* with *Bakke*—receive substantial attention. Emphasis in class is on energetic discussion and frequent writing. (Mr. Williams)

425—3 International Relations: The Present Patterns

(2953) This is a seminar on the Cold War with emphasis upon the politics of the world's two superpowers, the United States and the Soviet Union: how they created the United Nations, the Cold War, the many alliances, the nuclear arms race, and the numerous confrontations between themselves and their respective allies; how, too, they prompted the formation of the Third World and repeatedly intervened in its affairs with financial aid, advice, arms, alignments and troops; and finally, some reasons why they continue to perpetuate these massive manifestations of their great power. Textbook and periodicals are employed. (Mssrs. Bunnell, Gurry, McNemar)

430—3 Men, Women and American Culture

(2963) This seminar is designed to help students understand the experiences of men and women in American culture from the Victorian age to the present. Using interdisciplinary materials from social and intellectual history, psychology, anthropology, and literature, this course will explore how American culture has defined its ideals of masculinity and femininity since the mid-nineteenth century. We will study a variety of topics: Victorian sexuality, sex roles on the frontier, the "cult of true womanhood," moral reform in the Progressive Era, manliness and the Strenuous Life, sex roles in the Roaring Twenties, the family and the Great Depression, the return of domesticity in the Fifties, and the pros and cons of the Women's Liberation Movement. The course will include lectures, films, discussion, guest speakers, exams, and several papers. Reading will include Peter G. Filene's *Him/Her Self: Sex Roles in Modern America*; Elizabeth and Joseph Pleck, *The American Male*, and other books and articles. (Ms. Dalton, Mr. Rotundo)

470—2 Nuclear Weapons — Proliferation and Responses

(2972) This seminar follows the evolution of and reaction to The Bomb — from the discovery in 1938 of fission on Otto Hahn's table in Nazi Germany, to Hiroshima, the Cuban Missile Crisis of 1962, and the START Talks and cruise missiles and President Reagan's "Star Wars" speech in the 1980's. Historians, chemists, physicists, political scientists, and journalists are among those who tell the story, in lectures, documents, and secondary accounts. Readings include Richard Rhodes, *Ultimate Powers*; Edward Teller, *The Legacy of Hiroshima*; Herbert York, *Oppenheimer, Teller, and the Super Bomb*; and Jonathan Schell, *The Fate of the Earth*. The course entails class discussion of the lectures and readings, short papers, quizzes, exams. (Mr. Quattlebaum)

SEMINARS IN HISTORY

450 A Social History of Families in America (Not offered in 1984-85.)

455—2 The Twentieth Century Constitution, the Courts, and Individual Rights

(2672) The seminar focuses on the often conflicting rights of individuals and society as decided by the courts in 20th century America. What are the legal powers and limits of government to regulate the actions of individ-

uals in the public interest? To what extent may government regulate private businesses relative to working conditions, consumer interests, or the environment? To what extent may the courts act to protect the rights of freedom of speech, press, assembly, and religion; rights against illegal search and seizure; rights of those accused of crimes; and equal rights to vote, education, employment, and housing opportunities regardless of race, religion or sex? The seminar examines the relationships between ethics and social values, political and economic developments, special interest groups, and the development of law. Students analyze the roles of lawyers and judges; legal procedures; the influence of special interests; and the views of prosecutors, plaintiffs, and defendants. The readings emphasize the case method by works such as Westin's *The Anatomy of a Constitutional Law Case*; Richard Cortner's *The Wagner Act Cases*; Anthony Lewis' *Gideon's Trumpet*; Richard Kluger's *Simple Justice*; Peter Irons' *Justice at War*; Thomas Lyons' *The Supreme Court and Individual Rights in Contemporary Society*; and, especially, Supreme Court decisions. The basic classroom procedure is Socratic dialogue, and the climax of each student's study is the critical analysis of a constitutional law case. (Mr. Lyons)

460—2 American Urban History (Not offered in 1984-85.)

The following course is offered because the Academy's Archives are probably the best in American secondary education. Since the course is neither a "survey"—300 nor a "seminar"—400, the course does not count as one of the four trimester requirements for graduation. This tutorial-research opportunity is a unique offering in American secondary schools.

(2692) Topics in the History of Phillips Academy and Abbot Academy

The course involves work in the Phillips Academy and Abbot Academy Archives on some aspect of the history of the schools; the course introduces the student to the problems of working with the raw materials of history. Permission of the instructor is required for enrollment. (Mrs. Quattlebaum)

Interdisciplinary

All courses are electives. Courses in this section may be taken during more than one trimester unless the individual description indicates to the contrary.

(9501) Basic Study Skills

(9502) Four class periods. Not open to Juniors in the Fall. The course is designed to help students build effective study skills through understanding more about the learning process. Class discussion focuses on the problems of motivation, concentration and retention. Exercises are designed to work on improvement in each of these areas and to develop proficiency in planning studying time, in developing accurate yet flexible reading comprehension, in taking notes or marking books, and in preparing for exams. This course may be taken for at most one term. Prerequisite: permission of the instructor. (Mrs. Brother)

(9503) Four class periods. Recommended for Upper Middlers and Seniors, this course is designed to teach strategies for increasing reading efficiency and comprehension. It places particular emphasis on techniques for reading textbooks and novels, vocabulary development, and the improvement of comprehension through analysis of assigned readings. This course may be taken for at most one term. (Ms. Brown)

(9511) Efficient Reading Skills

(9513) Four class periods. Recommended for Upper Middlers and Seniors, this course is designed to teach strategies for increasing reading efficiency and comprehension. It places particular emphasis on techniques for reading textbooks and novels, vocabulary development, and the improvement of comprehension through analysis of assigned readings. This course may be taken for at most one term. (Ms. Brown)

(9522) Language Skills I

(9523) Four class periods. Open to Juniors and Lower. This course is designed for those students who need supplementary help in overcoming weaknesses in writing, spelling and vocabulary. Specific assignments are geared to the needs of each student. Open only to students who have permission of the instructor. (Ms. Brown)

(9533) Language Skills II

Four class periods. Seniors and Uppers who need help in writing essays and research papers may elect this course for the Spring Term only. Organizational skills, paragraph and sentence structure, and theme development will be reviewed depending on students' individual needs. Students must have permission of the instructor. (Mrs. Brother)

(9351) Etymology

(9352) Four prepared class periods. For all classes. Training in the interpretation of English words by systematic analysis of elements derived from Greek, Latin and other Indo-European languages. Exercises expand vocabulary and develop precision of expression and understanding. The course may be taken for at most one term.

(9371) **Greek Literature in Translation**

(9372) Four prepared class periods. Open to all classes. A systematic study of the masterpieces of early European civilization as seen in their proper literary, intellectual, and historical context. In what is essentially a history of ideas, the major *genres* of epic, tragedy, comedy, satire, history, erotic poetry, and philosophy are stressed as aspects of the wider evolution of early European thought which laid the basis for modern civilization. The major problems which still confront human life are explored through the writings of Homer, Aeschylus, Sophocles, Euripides, Herodotus, Thucydides, Aristophanes, Plato and others. This course may be taken for at most one term. (Dr. Pottle)

(9362) **Mythology**

(9363) The interest of the Twentieth Century in Classical Mythology has stemmed from three main sources: the psychoanalytical use of myth, progress in the field of classical archaeology, and anthropological study of myth. Preliminary exploration of the works of Freud in psychology, Schliemann and Evans in archaeology, and Frazer, Graves, and Levi-Strauss in anthropology leads to the detailed study of the myths of Oedipus, Theseus, and Agamemnon among others. The myths are considered living entities changing in the hands of each artist who deals with them whether it be Homer or Joyce, Aeschylus or O'Neill, an anonymous Greek vase painter or Dali, Euripides or Strauss. Works of literature, art, and music provide the core for the study of the use of myth in human life. This course may be taken for at most one term. (Mr. Krumpe)

(9601) **Typing**

(9603) This course in personal typing is open to all students; it is designed for beginners to learn the keyboard and basic typing skills. There is no charge, but students must supply their own typewriters. This course does not earn academic credit. (Mrs. DiClemente)

For other courses which are interdisciplinary in nature, see Art 311 and RelPhil 46.

Mathematics

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late twentieth century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality;

the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his or her energies and curiosity to the organization or dissemination of mathematical knowledge.

The mathematics curriculum is built around a core sequence of eight trimester courses: three of elementary algebra, two of geometry, one of intermediate algebra and two of precalculus topics. The completion of these eight trimesters will satisfy diploma requirements, but an additional trimester is required before entering the calculus. Placement of new students in the appropriate first course is made by the department considering the record in previous schools, the results of a self-administered diagnostic test in elementary algebra which is sent to newly admitted students in the Spring, and the course program chosen by the entering student. In general, algebra courses taken before the eighth grade and geometry courses taken before the ninth grade will not earn placement credit. Examinations to validate first and second year algebra skills are given early in the Fall trimester, at which time students who are incorrectly placed can be shifted to higher or lower level courses.

Students entering with no prior study of algebra start with *Mathematics 10*; those with a partial year of algebra enter *Mathematics 11*. Students entering with a full year of algebra start with *Mathematics 20-12*. If the results of placement testing indicate a need for *Algebra Review*, then students who have not taken geometry start with *Mathematics 19-1* and continue to *Mathematics 20-23*.

Students who have taken one year of elementary algebra and one year of geometry will satisfy diploma requirements by taking *Mathematics 32-1* and *35-23*. Those with a strong background in intermediate algebra may enroll directly in *Mathematics 35-12*.

If, on the basis of our testing, a student's algebra skills are weak, then *Mathematics 25-0* may be required before precalculus.

It is generally best to take the College Entrance Examination Board Achievement Test in Mathematics near the end of or immediately following *Mathematics 36*.

For students who wish to go beyond the re-

quired level, the department offers many electives, some of which lead up to and beyond the Advanced Placement Calculus Examinations of the College Board. The prerequisites of these elective courses should be noted, particularly by students who are involved in Off-Campus Programs.

Computer

The Mathematics Department is located in Morse Hall, which also houses three computer rooms. One room has 11 timesharing terminals connected to a DEC minicomputer system. The other two rooms have microcomputers; one with 9 IBM Personal Computers and the other with 7 Apple computers and 1 Radio Shack computer. A variety of computer courses are offered that range from an introduction to computers to preparation for the Advanced Placement test in Computer Science. Computer languages taught include APL, LOGO, BASIC and Pascal.

Hand Calculators

Every student taking Mathematics or Physical Science must have a suitable hand calculator capable of handling square roots, sines, cosines, reciprocals, logarithms and exponents. Any calculator with *sin*, *log* and inverse function keys is adequate for all course use.

COURSES LEADING TO SATISFACTION OF THE DIPLOMA REQUIREMENT:

10—0 Elementary Algebra

(3100) Five prepared class periods. A year-long course for students who have had little or no algebra. Stress is placed on an understanding of the elementary structure and language of the real number system, on the manipulative skills of simplifying expressions and solving first and second degree equations, and on the study and graphing of polynomial functions. Significant work is done with word problems, inequalities, irrational numbers, right triangle trigonometry, and an introduction to computer programming in BASIC. **Prerequisite:** None.

11—0 Elementary Algebra

(3110) Five prepared class periods. A year-long

course for students who have had previous instruction in algebra but whose knowledge and skills are not strong enough to enter the regular second level course. The topics covered are the same as *Mathematics 10—0*. **Prerequisite:** A half to a full year of algebra.

19—1 Algebra Review

(3191) Five prepared class periods. A course for students who enter with a full year of algebra whose knowledge and confidence indicate they need a brief review of algebra. **Prerequisite:** A full year of algebra.

20—12 Geometry (T2) (a two-term commitment)

(3204) Five prepared class periods. A two-term course for students who have had a *strong* ninth grade algebra course, but no geometry. This course is a thorough and systematic presentation of synthetic Euclidean geometry. Strong emphasis is placed on the need for precision and clarity in the writing of formal proofs. **Prerequisite:** A complete course in elementary algebra comparable in coverage to *Mathematics 10—0*.

25—0 Algebra Consolidation

(3250) Five prepared class periods. A course for new students entering Phillips Academy with one year of algebra and one year of geometry. Required of those students whose elementary algebra or whose general mathematical maturity may prove inadequate to sustain precalculus studies. Comprehensive review of elementary algebra. Coordinate geometry. Introduction to algorithms and use of the computer. Extended problem solving. This course will normally be followed by *Mathematics 35-12*.

31—0 Geometry and Circular Functions

(3310) Five prepared class periods. A year-long course for entering students who have not studied geometry. The course covers Euclidean and coordinate geometry, the circular functions and their geometrical applications. **Prerequisite:** Credit for one year of elementary algebra and one year of intermediate algebra.

32—1 Intermediate Algebra

(3321) Five prepared class periods. Topics in intermediate algebra, including sets; properties of real numbers; factoring; fractions; exponents; radicals; absolute value; inequality; solutions of linear, quadratic, and radical equations. **Prerequisite:** *Mathematics 20*, or its equivalent.

35—12 **Precalculus (T2)** (a two-term commitment)
 (3354) Five class periods, four prepared and one
 35—23 unprepared. More topics in intermediate al-
 (3355) gebra, including absolute value; inequality;
 linear, quadratic, polynomial, exponential,
 logarithmic, trigonometric, and inverse functions;
 graphing and applications of these functions. Comple-
 tion of this course satisfies the diploma requirement.
Prerequisite: *Mathematics 32*, or its equivalent.

40—12 **Elementary Functions (T2)** (a two-term
 (3404) commitment)
 Five prepared class periods. A two-term
 course for entering Seniors who have not had trigonome-
 try but have studied three years of mathematics in high
 school. Required of those students whose prior work
 fails to satisfy diploma requirements. Work focuses on a
 review of the fundamentals of algebra, and the elemen-
 tary functions. Enough trigonometry is done in the Fall
 Trimester so that students with high quality work may
 satisfy the diploma requirements and take *Mathematics*
 50—23 (T2). **Prerequisite:** Credit for three years of high
 school mathematics.

ELECTIVE COURSES

Only courses with sufficient enrollment will be given.

33—3 **Exploring Data**
 (3333) Four prepared class periods. An introduc-
 tion to techniques of uncovering the useful
 information contained in masses of numerical data. No
 reliance is placed on the knowledge of or development
 of heavy mathematical tools. **Prerequisite:** None.

36—1 **Precalculus**
 (3361) Five class periods, four prepared and one
 36—3 unprepared. Required of students coming
 (3363) from 35 (T2) who plan to study calculus.
 Topics that bridge the gap between algebra
 and calculus, including exponential, logarithmic, circu-
 lar and trigonometric functions. In the Fall Term, new
 Seniors who do poorly on in-class testing may be placed
 in the first term of 40(T2). **Prerequisite:** *Mathematics 35*,
 or its equivalent.

41—1 **Probability**
 (3411) Four prepared class periods. Includes sam-
 41—2 ple spaces, counting problems, sampling,
 (3412) conditional probability, random variables,
 expected value, variance, standard devi-

ation, binomial and normal distributions. The computer
 is used on applications that are too time-consuming to
 perform by hand and to simulate experiments for which
 there is no model. **Prerequisite:** *Mathematics 35*, or its
 equivalent.

42—2 **Statistics**
 (3422) Four prepared class periods. Applications of
 42—3 various distributions, hypothesis testing,
 (3423) statistical inference and data organization.
Prerequisite: *Mathematics 41*.

43—3 **Problem Solving**
 (3433) Four prepared class periods. A variety of
 non-routine problems drawn from some of
 the major ideas of precalculus mathematics, requiring
 various degrees of insight and creativity, will be consid-
 ered. A synthesis of mathematical knowledge and meth-
 ods will be the major goal of the course. For example, an
 inequality might be developed both algebraically and
 geometrically and then applied to problems in Solid Ge-
 ometry, Trigonometry and Logarithms. **Prerequisite:**
Mathematics 35 (may be concurrent), or its equivalent.

50—23 **Elementary Calculus (T2)** (a two-term
 (3505) commitment)
 Four prepared periods. This course, for Se-
 niors only, does not specifically prepare for the Ad-
 vanced Placement Examination. The approach to calcu-
 lus is concrete, informal and applied, as opposed to
 abstract, deductive, and theoretical. Topics include ap-
 plications of the derivative and integral to problems of
 optimization, curve sketching, rate of change, area, vol-
 ume, and work. Techniques will be developed to apply
 derivatives and integrals to logarithmic, exponential,
 trigonometric and inverse functions. **Prerequisite:** *Math-*
ematics 36, or an equivalent course in trigonometry and
 elementary functions.

51—1 **Elementary Calculus**
 (3511) Five prepared class periods. The first of a
 51—3 three course sequence that covers the sylla-
 (3513) bus for the AB Advanced Placement Exami-
 nation of the College Entrance Examination
 Board. Topics covered include: review of functions and
 graphing, theory of the definite integral, introduction to
 the derivative and its applications. **Prerequisite:** *Math-*
ematics 36, or its equivalent.

52—12 **Elementary Calculus (T2)** (a two-term
 (3524) commitment)
 52—23 Five prepared class periods. Course finishes
 (3525) the AB Advanced Placement Syllabus. The-

ory of the derivative, Chain Rule of differentiation, related rates, Rolle's Theorem, Mean Value Theorem, techniques and applications of integration, Fundamental Theorem of the Calculus. **Prerequisite:** *Mathematics 51*.

54—3 Infinite Series and Differential Equations
(3543) Five prepared class periods. This course extends the work of *Mathematics 52* to prepare the student for the College Board BC Advanced Placement Examination. **Prerequisite:** *Mathematics 52*, or may be taken concurrently with 52.

55—0 Honors Calculus
(3550) Five prepared class periods. A year-long course in analytic geometry and calculus which begins only in the Fall. Students contemplating Off-Campus Projects at some time during the year should not enroll in this course. Enrollment is limited to able and committed mathematics students, as the coverage is more theoretical and extensive than that of *Mathematics 51, 52*. Satisfactory completion of this course prepares for the College Board BC Advanced Placement Examination. **Prerequisite:** *Mathematics 36*, or its equivalent and departmental permission.

61—23 Calculus Continued (T2) (a two-term commitment) Four prepared class periods. The course completes preparation for the College Board BC Advanced Placement Examination, but may include additional topics at the discretion of the instructor. Not open to students from *Mathematics 55* or others with satisfactory grades on the BC Advanced Placement Examination. **Prerequisite:** *Mathematics 52*, or its equivalent.

65—0 Calculus of Vector Functions
(3650) Four prepared class periods. For students of demonstrated ability and interest. Vectors and the geometry of 3-space, functions of many variables, partial differentiation, multiple integration, line integrals, Green's Theorem, Stokes' Theorem, linear transformations and matrices. **Prerequisite:** *Mathematics 55* or permission of the instructor.

68—123 Mathematics Seminar
(3681) A course for students who have finished
(3682) *Mathematics 65*. The topics studied will vary
(3683) according to the needs and interests of the students. **Prerequisite:** *Mathematics 65*, and permission of the instructor.

COMPUTER COURSES

17—1 APL For Beginners
(3171) Four prepared class periods. An introduction to the APL language and programming techniques. Designed to complement elementary algebra courses. No prior programming knowledge required. **Prerequisite:** For Juniors and Lower currently enrolled in *Mathematics 10, 11, or 19*.

27—1 Computer Literacy
(3271) Four prepared class periods. A one-term course in programming in the LOGO language for students with little or no previous experience with computers. For those students who are interested in learning how they might utilize the computer in their future education, research, avocations, and day-to-day lives. Topics, which will be introduced through the use of sophisticated pre-programmed packages, may include graphics and animation, financial modeling and forecasting, word processing, data acquisition and information sharing. Students will program simplified versions of these important tools. Modular design, structured programming, and list processing will be stressed. **Prerequisite:** none. Not open to students from *Mathematics 47*.

47—1 Beginning Computer
(3271) Four prepared class periods. An introduction to programming using a structured BASIC language. Topics will include the solution of both mathematical and non-mathematical problems. **Prerequisite:** *Mathematics 20*. Not open to students from *Mathematics 27*.

49—1 Intermediate Computer
(3491) Four prepared class periods. For students with some programming experience and an interest in computer science topics. The course will introduce the Pascal language. Various standard algorithms such as sorting and searching will be developed. **Prerequisite:** *Mathematics 27, Mathematics 47* or permission of the department.

57—0 Computer Science
(3570) Five prepared class periods. A year-long course in algorithms and data structures using primarily the Pascal language. The emphasis will be on programming methodology and data structures. The curriculum will be guided to a large extent by the Course Description of the College Board Advanced Placement

Examination in Computer Science.

Prerequisite: 1984-85: *Mathematics 27* or *Mathematics 47*. With department permission, students who have taken *Mathematics 49* may join the course in the Winter Trimester. 1985-86: *Mathematics 49* or permission of the department.

SPECIAL COURSES

Mechanical Drawing 30, 31, and 32 are given at the same time in the same room by the same instructor, with the total number of students being limited by the number of work stations.

30—1 Mechanical Drawing (Elementary)

(3701) Two prepared class periods and four unpre-

pared. Not open to Juniors. A term-con-

tained beginning drawing course that includes the use of drawing instruments,

lettering, geometric constructions and loci, sketching, orthographic projection, and spatial relations. Special stress is placed on a thorough mastery of fundamental concepts and skills.

31—1 Mechanical Drawing (Intermediate)

(3711) Two prepared class periods and four unpre-

pared. A term-contained technical drawing

course in applied Descriptive Geometry and

31—3 Graphics involving work in sectioning and

(3713) conventions, isometric and oblique pictorial

projections, intersections, primary auxiliary views, and developments. **Prerequisite:** *Mechanical Drawing 30*.

32—2 Mechanical Drawing (Advanced)

(3722) Two prepared class periods and four unpre-

pared. A term-contained technical drawing

32—3 course consisting of substantial work in di-

(3723) mensioning, inking, detail and assembly en-

gineering drawing, print reading, perspective and/or fundamentals of design. **Prerequisite:** *Mechanical Drawing 31*.

30—1 Navigation (Coastal Piloting)

(3731) Four prepared class periods. Not open to Ju-

30—2 niors. A term-contained course in Piloting:

(3732) i.e., marine navigation within sight of land

or landmarks. Substantial dead reckoning and special case plotting is done on charts and small area plots. Aids and dangers to navigation are studied. Prac-

tical use is made of Tide and Current Tables, Light Lists, compass correction, and electronic aids.

31—3 Navigation (Celestial)

(3743) Four prepared class periods. A term-con-

tained course in Celestial Navigation: i.e.,

navigating at sea by means of the stars, sun, moon, and

planets. Nautical astronomy is studied. Significant work

is done in coordinate conversion, time, altitude intercept

theory, the solution of the Navigational Triangle by HO

214, HO 229, and the Nautical Almanac, special lines of

position, the use and correction of a marine sextant,

times of observational twilight, and "a day's work" at

sea. **Prerequisite:** *Navigation 30*.

Modern Foreign Languages

Andover's requirement of at least three high-school years of an ancient or modern language rests on the firm belief that direct acquaintance, through language, with the spirit and people of other lands is a psychological and intellectual resource of inestimable value for each individual, for every country, and for our common world.

The diploma requirement is satisfied by completion of three trimesters at the 30-level reached through the regular sequence, or by one trimester of 40-level reached through the accelerated sequence. Placement of new students is based on their previous school record, on the questionnaire sent to them and their current language teachers in the spring, and, when appropriate, on a personal interview with the language chairman at Andover. Details regarding various options and the diploma requirement as it is applicable to "incoming Uppers and Seniors who begin a new language at Andover" are available from the Registrar's Office.

With the exception of Italian (limited to Seniors), each of our languages, ancient and modern, may appropriately be started by students of any grade, Juniors (9th) through Seniors. Many Andover students continue their language study beyond the third year, and a good number of them simultaneously study two or even three languages.

Small classes, flexible placement, and opportunities for acceleration assure that each student is in the optimum learning situation. The foreign language is the language of the classroom. In conversation, in reading, and in writing, the goal is direct communication in the foreign language rather than through translation. The classroom experience is expanded by the language laboratory; media resources (e.g., periodicals, radio broadcasts, movies); the staging of plays; club activities; language events and programs at Andover or nearby schools. At all levels of instruction attention is focused both on basic language skills and, increasingly, on the literature, history, and various art forms which reveal the people whose languages are being studied.

For information on School Year Abroad and other opportunities to study abroad, students should see their language instructor or the chairman of the Language Division.

Chinese

10-20—0 Intensive Chinese

(4420) Five prepared class periods. Open to Uppers and Seniors, with permission of the Language Division. An introduction to modern spoken and written Chinese (Mandarin), stressing pronunciation and oral-aural facility, and including the reading and writing of characters. Extensive use of language laboratory.

French

The French Department offers a six-year course of study. At all levels French is the language of the classroom, and in all courses the French language is taught in a cultural context. The first two years emphasize basic language structures. The third year serves as a transition to advanced courses which offer in-depth study of the literature and civilization of the French-speaking world. Students are encouraged to supplement classroom study with travel and study in France and other French-speaking countries through participation in programs such as School Year Abroad, the Antibes and Paris exchange programs, a class trip to Québec (*French 45-3*), and summer programs. Informa-

tion on these programs may be obtained from the Modern Language Office.

10—0 Première année

(4010) First-year French for students who have not had a previous course in the language. Five prepared class periods. Listening comprehension and the use of basic conversational patterns of French speech are emphasized. Elementary grammatical and idiomatic structures are introduced as well as appropriate reading material. Students make frequent use of the language laboratory.

11—0 Premier niveau

(4030) First level French. Five prepared class periods. This course is designed for the student who has had previous instruction in the language, but whose knowledge and skills are not secure enough for entrance to a second-level section. It is also appropriate for students with experience in other languages who wish to begin the study of French. The course emphasizes the development of oral-aural skills and prepares for *French 21* the following year. Students who demonstrate unusual aptitude and interest are invited to enter *French 22*, the second level accelerated course. Text in 1983-4: *Méthode de Français*, J. Boorsch, P. Capretz.

21—0 Deuxième niveau

(4060) Second level French. Five prepared class periods. For students who have completed *French 10* or *French 11* and for new students who qualify through teacher recommendations or placement examination. While continuing to develop aural-oral skills, the course involves reading non-technical French prose and writing simple compositions. Texts in 1983-4: Pucciani et Hamel, *Langue et Langage*; P. Block, ed. *Débuts littéraires*, Goscinnny, *Le Petit Nicolas*.

22—0 Cours accéléré. Deuxième niveau

(4070) Accelerated second level French. Five prepared class periods. Upon successful completion of this course, students are recommended either for fourth level or for two trimesters of the third level sequence to be followed by a single-trimester fourth level course. Texts in 1983-4: Sturges, Cregg, Herbst, *Une Fois pour Toutes*; Goscinnny, *Le Petit Nicolas*; Sartre, *Les jeux sont faits*; Kirkland, Knox, *A mon avis*.

Third-Level Courses

A two-trimester departmental Conversation and

Composition course is followed by a trimester course which creates a transition to more specialized studies.

Conversation et Composition

Four prepared class periods. Students gain practice in conversation and composition in a course which stresses the development of all four basic language skills: listening, speaking, reading, writing. The focus of the course may be chosen between the following options.

- 30—12 Conversation et Composition: Réalités. (T2)**
(4094) (a two- term commitment).

Activities and discussions spring from authentic documents of everyday life, from tickets and schedules to magazine articles. Emphasis will be placed on writing for practical purposes.

- 31—12 Conversation et Composition: Fictions. (T2)**
(4104) (a two term commitment).

Provocative short works of fiction are the starting points for discussions and for assignments in imaginative writing.

Cours spécialisé

Four prepared class periods. Each third trimester course involves learning about a particular subject in French, with language review supplied as needed. Whereas any one of the seven courses offered below could fulfill course objectives for all students, the Department prefers to offer variety, with the understanding that student choice can be accommodated only to the extent that overall enrollment permits.

- 32—3 Le village français**
(4113) Using, as points of departure, the impressions and misimpressions which the French and Americans have of each other's culture, this course attempts to give the student a better understanding of the French people and their institutions as reflected in the microcosm of a town. With the student's hometown as a basis of comparison, several French towns are examined in depth, including the provençal towns of Roussillon and Cassis and a town of the student's own choice. The basic text, Wylie, *Village en Vaucluse*, is complemented by readings, lectures, original documents, and both national and regional newspapers and magazine articles.

- 33—3 L'Histoire de la France jusqu'en 1875**
(4123) This course concentrates on the main events and personalities from the reign of Louis XIII

to the founding of Third Republic in 1875. The format combines lectures by the instructor, class discussions, slides, and film presentations. Readings from the text — *La civilisation française*, Marc Blancpain, Jean-Paul Couchoud — are supplemented by readings from two books on library reserve: *Histoire Géographie*, Lucien Pernet, Marcel Baleste; *Initiation à la culture française*, Hester, Parker, Griguat. (see French 43-1.)

34—3 Le roman

- (4133) A particular novel is read and discussed during the term. (Novels selected in the past have included Sartre, *Les Jeux sont faits*, Camara Laye, *L'Enfant Noir*, Vercors, *Le Silence de la Mer*.)

36—3 Le cinéma

- (4143) Usually two works of fiction are studied along with two films. The books and films for the course vary from year to year.

37—3 Le journalisme

- (4153) Students study current examples of French journalism for discussion of contemporary issues, and for a better understanding of the nature of journalism and of the culture represented.

38—3 Contes

- (4163) Francophone literature abounds in examples of the tale, from the fairy tales of Perrault and folk tales of various francophone countries to the satirical tales of Voltaire. This course will offer an overview of the genre, while concentrating on particular examples.

39—3 Le théâtre

- (4173) An active participation course in which the student follows one play from the initial reading through to its final production, taking part in each of the four major phases: reading, analysis, production, and performance. (Plays presented in the past have included Camus, *Le Malentendu*, and Ionesco, *La Cantatrice Chauve*.)

40—123 La civilisation française

- (4191) Four prepared class periods. This course,
(4192) consisting of three term-contained units,
(4193) deals with aspects of French civilization as conveyed through various media. Students increase their practical vocabulary through discussion of texts, films, and videotapes. (Text in 1983-4: Hules, Baier, *Comment peut-on être français?*)

41—2 Le monde francophone en dehors de l'Europe (Formerly French 43-3)

Four prepared class periods. As an international colonial power France spread her culture throughout the world. The course studies the civilizations of West, Equatorial, and North (Arab) Africa as well as the French civilization of the Antilles (Haiti, Martinique, and Guadeloupe). In addition to geographical, social, and historical study, the course will include the following reading: J. Roumain, *Gouverneurs de la rosée*; Aimée Césaire, *La tragédie du roi Christophe*; F. Oyono, *Le vieux nègre et la médaille*.

42—0 Littérature française

(4210) Four prepared class periods. The first year of a two-year sequence leading to the Advanced Placement Examination in French Literature, open, with departmental permission, to students who have completed three trimesters of third-level courses, and to properly qualified new students. Emphasis is placed on vocabulary building, on close analysis of major literary works, and on learning to write about literature. Texts include: Camus, *L'Étranger*; Voltaire, *Candide*; Sartre, *Huis Clos*; Balzac, *Le Colonel Chabert*; and Mauriac, *Thérèse Desqueyroux*.

43—1 L'Histoire de la France depuis 1875

(4221) Four prepared class periods per week. The history of France from the founding of the Third Republic after the Franco-Prussian War to the current Fifth Republic. Lectures by the instructor, class discussions, written and oral reports by the students, slide and film presentations. Reading selections from: *La Troisième République 1870-1914*, Georges Bourgin; *La Troisième République 1914-1940*, Jacques Néré; *La France 1870-1970*, Christian et Arlette Ambrosi; *La IVe République*, Jacques Julliard; *Aujourd'hui 1945-1975*, Jean Mathieux et Gérard Vincent. (See French 33-3.)

44—1 Cours avancé de conversation et de phonétique

(4231) Four prepared class periods. Intended for students who understand, read and write French well and who already speak at a competent level, but who need further drill in conversational patterns and idiomatic expression. Diction, elocution, and intonation are also stressed through role-playing, speeches, and debates.

45—3 Québec et les Québécois (Formerly French 43-3).

Four prepared class periods. Some amount

of theory is balanced with observation and analysis of everyday life in Québec province to understand its political, economic, and social institutions, and such areas as religious, educational, and artistic life. Emphasis is on a close study of the media of Québec as well as personal involvement through liaison with Québec schools, students and newspapers, and through contact with French-speaking areas of Massachusetts and New Hampshire. The course may culminate in a trip to Québec.

51—123 Cours avancé de langue

(4261) Five prepared class periods. A course designed to meet the requirements of the Advanced Placement Examination in French Language. Open to students who have completed three terms of fourth-level French and to qualified new students. Emphasis is placed on vocabulary, conversation, composition, and reading, not only in literature, but in current newspapers and periodicals. The choice of texts is determined by the class and the instructor.

52—0 Cours avancé de littérature

(4270) Five prepared class periods. The second year of a two-year sequence, open with departmental permission to students who have completed French 42 and to others who are properly qualified. Primarily a seminar in which students discuss their interpretations of the works studied, the course also includes lectures and instruction in *explication de textes*. Preparation for the Advanced Placement Examination in French Literature includes the close reading of texts such as: La Fontaine, *Fables*; Molière, *L'Avare*; Racine, *Phèdre*; Beaumarchais, *Le Barbier de Séville*; Chateaubriand, *René*; Flaubert, *Un Coeur simple*; Baudelaire, *Les Fleurs du Mal*; and poetry of Hugo, Rimbaud, Apollinaire, Césaire and Damas.

60—123 Littérature moderne

(4281) Two prepared class periods plus one weekly (90 minute) seminar. Open to students who have completed fifth-level French or the equivalent. The course studies selected novels and dramas representative of the modern era. Emphasis is on particular writers and what they add to our understanding of the human condition in our times. Authors studied may include: Proust, Gide, Colette, Malraux, Mauriac, Aragon, Saint-Exupéry, Giono, Anouilh, Giraudoux, Aymé, Camus, Sartre, de Beauvoir, Hébert, Laye and Senghor.

- (9001) **Projets indépendants**
- (9002) Qualified Seniors may undertake independent study projects in French under the direction of a faculty supervisor. Those who
- (9003) wish to do apprentice teaching during either the Winter or the Spring Term will study the techniques and methods of language instruction and will practice, under careful supervision, in beginners classes. Apprenticeships are usually undertaken along with a program of independent reading and writing in French. (By departmental permission.)

German

The German Department offers a six-year course of study with the purpose of developing the ability to understand spoken German, facility in speaking, reading fluency, and the ability to write German correctly. Students who demonstrate unusual aptitude and interest during the first year are invited to enter special accelerated sections.

The more advanced courses may give an introduction to German literature since the eighteenth century and a survey of German history, culture and geography. At all levels, German is the language of the classroom. Extensive use is made of the Language Laboratory.

10—0 First-Level German

(4300) Five prepared class periods. The beginning course seeks to develop aural comprehension and oral expression, as well as a foundation in the basic grammar. The basic patterns of the language are practiced by repetition and variation. Basic Text: *Deutsch Heute*, by Moeller and Liedloff (Houghton Mifflin).

12—23 First-level German (Honors) (T2) (a two-term commitment)

(4305) Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of one trimester of *German 10*. Successful completion of 12 enables students to enter 22. Texts are essentially the same as those used in *German 10* and *German 20*.

10-20—0 Accelerated First and Second-Level German

(4310) Five prepared class periods. Open to Seniors, and to Uppers with permission. A year-long accelerated introductory course covering in one year the essential material of *German 10* and *German*

20. Basic text: *Deutsch Heute*, by Moeller and Liedloff (Houghton Mifflin).

20—0 Second-Level German

(4320) Five prepared class periods. The systematic study of basic patterns and grammar is continued. Both close and comprehensive reading of modern German prose is practiced extensively. Elementary writing is introduced at this level. Some of the books read include Kessler, *Kurze Geschichten*; Schnitzler, *Der blinde Geronimo*; Remarque, *Drei Kameraden*.

22—0 Accelerated Second-Level German

(4330) Five class periods. A year-long accelerated course open to students who have successfully completed *German 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth-level courses. Texts and reading materials are essentially those of *German 20* and *German 30*.

30—0 Third Level German: Selected Readings

(4340) Four prepared class periods. Emphasis is placed on reading comprehension, vocabulary building, and oral expression. Throughout the year grammar is reviewed in Sparks and Vail, *German in Review*. Some of the books read include Brecht, *Kalendergeschichten*; Dürrenmatt, *Der Richter und Sein Henker*; Aichinger, *Der Gefesselte und andere Kurzgeschichten*; Dürrenmatt, *Der Besuch der alten Dame*; Ödön von Horvath, *Jugend ohne Gott*.

40—123 Advanced German Language and Literature

(4351) Five prepared class periods. This course is designed to prepare for the Advanced Placement Examination in German Language. (4352) Open to students who have completed the equivalent of three trimesters of third-level German and to qualified new students. Emphasis is placed on vocabulary, conversation, composition, and reading, not only in literature, but also in current newspapers and periodicals. The choice of texts is determined by the class and the instructor. (4353)

50—123 Fifth-Level German

(4361) Four prepared class periods. Contents vary according to the needs and interests of the students. (4362) (4363)

60—123 Sixth-Level German

(4371) Four prepared class periods. Contents vary according to the needs and interests of the students. (4372) (4373)

- (9001) **Senior Project**
 (9002) Under the guidance of a member of the German Department, a Senior has the opportunity to do special work in German. It may include supervised teaching of an elementary class, or work of his own choice in a special field.

Italian

- 10-20—0 First and Second Level, Intensive**
 (4400) Open to Seniors, and to Uppers with permission. Five class periods. Four additional hours, to be arranged, will take the place of about 1/2 of the usual homework obligation: these small drill sessions, plus use of the language laboratory, will afford intensive review leading to spontaneity in understanding and speaking Italian. A basic college text is supplemented by selected readings, radio recordings, and the libretti and music of Italian opera. (Dr. Pascucci)

Russian

Communication in Russian and a knowledge of Russian culture are essential for productive interaction with the U.S.S.R. in technology and science, and for achieving controlled, responsible international relations. Before studying Russian, many consider it strange and difficult; but its alphabet and vocabulary have the same sources as English, and it follows the same principles of grammar. Continuous oral, visual and instructional use quickly makes Russian familiar and enjoyable. The Russian Department offers a five-year course of study. This well-established program ensures confident progress in speaking, aural comprehension, reading and writing. Students who demonstrate unusual aptitude and interest during the first term are invited to enter special accelerated sections in the second term. It is the policy of the Department to attain exclusive use of Russian in the classroom no later than the middle of the first year.

- 10—0 Introduction to Contemporary Russian**
 (4500) Five prepared class periods. A year-long elementary course in speaking, listening, reading and writing. Texts: Kostomarov, *Russian for Everybody* (Russky Yazyk-Moscow); reference materials.

- 12—23 Contemporary Russian (Honors) (T2) (a)**
 (4515) two-term commitment)

Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of the first trimester of *Russian 10*. Successful completion of 12 enables students to enter 22. Texts are essentially those of *Russian 10* and *Russian 20*.

- 13—3 A Short course in Beginning Russian**

(4523) Four prepared class periods. Open to Seniors and Uppers. A term-contained introduction to speaking, reading, and writing Russian, using scientific, literary, and conversational text materials. This course enables students to feel comfortable with the somewhat different features of a Slavic language. It also gives a sound foundation for continuing courses in Russian language, history, and literature, whether at Andover or in college.

For other courses related to Russian history and culture see History 338 and History 339.

- 10-20—0 Intensive Contemporary Russian**

(4530) Five prepared class periods. Open to Seniors, and to Uppers with permission. A year-long accelerated introductory course covering two years in one. Texts: von Gronicka, *Essentials of Russian* (Prentice-Hall); Kostomarov, *Russian for Everybody*; *Graded Russian Readers* (Heath).

- 20—0 Intermediate Contemporary Russian**

(4540) Five prepared class periods. Completion of the elementary course with continued emphasis on active use. Texts: Kostomarov, *Russian for Everybody*; reference material and selected reading materials.

- 22—0 Intermediate Contemporary Russian (Honors)**
 (4550)

Five prepared class periods. A year-long accelerated course open to students who have successfully completed *Russian 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth-level courses. Texts and reading materials are essentially those of *Russian 20* and *Russian 30*.

- 30—0 Russian Expression: Conversation and Composition**
 (4560)

Four prepared class periods. Reading, conversation and writing. Texts: Khavronina, *Russian as We Speak It* (Progress-Moscow); Reading materials include

cultural and scientific selections.

40—123 Advanced Russian Composition and Russian Classical Literature

(4571) Four prepared class periods. Further work in conversation and writing, and an introduction to the "Golden Age" (19th Century) of

Russian literature with selected readings from Pushkin, Chekhov, Gogol, Tolstoy and other writers. Texts: Muravyova, *Verbs of Motion in Russian* (Progress-Moscow).

50—123 The Soviet People, Their Heritage and Literature

(4581) Four prepared class periods. Fall Term: RUSSIAN LITERATURE, readings from prerevolutionary and contemporary authors.

Winter Term: SOVIET PROTEST LITERATURE, a view of protest in the Soviet Union from the works of Solzhenitsyn, Yevtushenko, Okudzhava, Bulgakov, and others. Authors vary according to needs and interests of the class.

Spring Term: THE SOVIET PRESS a view of Soviet Life and culture as reflected in the media. The text is a subscription to a major Soviet newspaper.

(9001) Senior Project

(9002) Under the guidance of a member of the Russian Department, a Senior has the opportunity to do special work in Russian. It may

include supervised teaching of an elementary class or work of his own choice in a special field.

Spanish

The Spanish Department offers a six-year course of study. Students who demonstrate unusual ability and interest during the first year are invited to join an accelerated sequence. The language of the classroom is Spanish, and extensive use is made of the Language Laboratory. Students learn to understand, speak, read, and write the language, and also are given a comprehensive introduction to the literature and culture of Spain and Hispanic America.

10—0 Beginning Spanish

(4600) Five prepared class periods. Making use of the audio-lingual approach the course stresses understanding and speaking. A minimum of English is used in the classroom. Text: *Spanish for Mastery II*, and workbook, Valette and Valette (D.C. Heath). These are supplemented by language laboratory practice, selected readings, and other audio-visual materials.

Exercises in reading and writing are introduced after the student has acquired confidence in oral expression.

11—0 First Level Spanish

(4620) Five prepared class periods. For new students who have been exposed to Spanish but who are not fully qualified for *Spanish 20*. The course stresses the oral use of the language. Text: *Spanish for Mastery II*, and workbook, Valette and Valette (D.C. Heath) and selected readings. They are supplemented by language laboratory practice and other audio-visual materials.

10-20—0 Accelerated First and Second-Level Spanish

(4630) Five prepared class periods. Open to seniors, and to Uppers with permission of Department Chairman. A year-long accelerated introductory course covering two years in one. The basic texts are: *Spanish One* (Second Edition), by Jones/Ruiz Salvador (Van Nostrand); *Tres Farsas Contemporáneas y Un Secuestro* (see *Spanish 22*).

20—0 Second-Level Spanish

(4640) Five prepared class periods. Emphasis is on speaking, reading, simple theme writing, and vocabulary building, including the use of synonyms and antonyms. Oral fluency is stressed in accordance with the principles of the audio-lingual method. The basic text is: *Adelante* (see *Spanish 22*) Readings beyond the basic text are selected to meet the needs of each class.

22—0 Accelerated Second-Level Spanish

(4650) Five prepared class periods. Open to students who have completed *Spanish 10* or *11* with distinction, and to other qualified students with departmental permission. It covers the equivalent of the material of *Spanish 20* and *Spanish 30* and enables students to enter *Spanish 40* or *42*. Texts: *Adelante*, by Eduardo Neale-Silva, Robert L. Nicholas (Scott-Foresman); *Cuentos y Microcuentos*, by Guillermo Castillo-Feliú (Holt, Rinehart & Winston); *Tres Farsas Contemporáneas y Un Secuestro*, by Martínez-Ballesteros, Rubio and Whitehead (Independent School Press) and selected readings. In Spring Term students occasionally read and stage a one act play in Spanish.

Third Level Courses

Enrollment for *Spanish 30A* is by permission of Department Chairman. All other electives may be chosen in any sequence: they are of equal difficulty, continue the development of all language skills, and are unified by a common grammar syllabus (Couch, McCann, Rodriguez-Walter, Rubio-Maroto, *Una vez más*, Independent School Press).

30A—0 Spanish Language Review

(4660) Five prepared class periods. For students who have successfully completed *Spanish 20*, but need reinforcement in basic language structures. The goals of the course are achieved through the use of an intermediate grammar text, and readings which are selected according to the needs of the students. By permission of the Department Chairman.

31—123 Aspectos de la cultura y civilización del Mundo Hispánico

(4672) Four prepared class periods. An intermediate course which continues to develop oral and aural skills, as well as facility in written composition through a social-studies approach to the culture and civilization of the Hispanic world. Students must have demonstrated, in previous course work, a strong ability for self-expression and an interest in historical and cultural themes.

32—123 Introduction to Literature

(4681) Four prepared class periods. An intermediate course in which assignments and class discussion are based on works by Spanish and Latin American Authors. The readings, which vary by trimester, include short stories, a play and a novel.

34—123 Conversation and Composition

(4691) Four prepared class periods. An intermediate course which has as its principal goal the development of conversational and writing skills by dealing with topics of a general and contemporary nature.

35—2 Winter Term in Mexico

(4702) Students enrolled in a Spanish course at the 22 level or above may elect to spend the Winter Trimester in Mexico. Students intending to enroll in this course will do special research during the Fall Trimester under the direction of Mr. Couch and other members of the department. Interested students should see their Academic Advisor to be sure that their other courses and their diploma requirements will permit them to be off campus for that trimester. Final approval for participation in the program will be granted by the Dean of Studies.

40—123 Spanish: Language, Literature, Culture

(4711) Four prepared class periods. The purpose of the course is to review, refine and expand speaking, reading and writing skills and to further the student's interest in the Hispanic world through readings in history, literature, and current events.

Students showing marked ability will be eligible to take the A.P. Examination in Spanish Language. Texts used in the past have been: *Tesoro Hispánico*, ed. Lado et al. (McGraw-Hill); *Autorretratos*, ed. Durán; *Trabajo y Vida*, (Newbury House); *Retratos Simbólicos*, (Heinle & Heinle Co.); *Curso intensivo de español*, (Nivel Superior) (E.D.I.- 6, S.A.); various selections, literary and non-literary, from print and other media.

42—0 Spanish and Spanish-American Literature

(4720) Four prepared class periods. The course presupposes an extensive knowledge of grammar and vocabulary and a reasonable fluency in conversation. Emphasis is on written work, discussion and analysis of literary works. Students may take the Advanced Placement Examination at the end of this course if they so desire. Texts: Representative works of Ana María Matute, Unamuno, F. García Lorca, J.L. Borges, Pablo Neruda, and other literary works which complement the study of these major authors.

52—0 Advanced Spanish and Spanish-American Literature

(4730) Four prepared class periods. The course is open to students who have the equivalent of *Spanish 40* or 42, or with the permission of the instructor. This course prepares the student for the Advanced Placement Examination in Spanish Literature or Language. The course is an in-depth study of two significant authors each term. In the past the following texts have been used: *Cien años de soledad*, by García Márquez (Editorial Sudamericana, Buenos Aires); *Tres novelas ejemplares y un prólogo*, by Unamuno (Austral); *Antología Esencial*, by Pablo Neruda (Losada); *Ana María Matute*, Martí and Rubio (Independent School Press); *Cinco Maestros*, by Coleman (Harcourt, Brace and World, Inc.); *Fulgor y Muerte de Joaquín Murieta*, by Pablo Neruda.

60—123 Special Literary and Cultural Topics in Spanish

(4741) Four prepared class periods. Contents vary according to the needs and interests of the student.

(9001) Senior Project

(9002) Qualified Seniors may undertake projects of independent study in Spanish under the direction of a faculty advisor. They may also do apprentice teaching in beginning classes under faculty supervision.

See also Latin American Studies (History 348) listed under History and the Social Sciences.

Music

The diploma requirement in Music for entering Juniors and Lower Middlers is one trimester of music, which is satisfied by *The Nature of Music* (Music 20 or 21). This course is also a prerequisite for courses in the History and Appreciation and the Theory categories, but is not a prerequisite for the Applied category. Entering Upper Middlers must take a trimester course in Music or Art at the Academy: *Music 20* or its equivalent.

Entering Seniors need not take a Music course. Exemption from *Music 20* as a prerequisite is granted on the basis of an exam and/or by permission of the Department Chairman. However, there is no exemption from the Music diploma requirement.

APPLIED

15—123 Fidelio Society

(6151) Pass/Fail. Three prepared periods. Open to all classes. This small group of mixed voices is selected from the *Chorus* (Music 17). It performs on numerous occasions throughout the year both on *Chorus* programs and on its own. Its repertoire includes music of all types, early and modern, sacred and secular. Membership is by audition and is conditional upon good standing in the *Chorus*. This course, if failed, cannot be made up by examination.

16—123 Band

(6161) Two double periods. Open to all qualified students. Tryouts are held any time before the beginning of a term to test the student's ability and to arrange for seating. Volunteers from all classes who are not enrolled for credit are urged to join, on an extra-curricular basis. There are some school-owned instruments available for student use. All types of music for wind ensemble are rehearsed. It includes marches as well as classical, popular, and show music. Much sight reading is done, and at least one public concert per term is given. This course, if failed, cannot be made up by examination.

17—123 Chorus

(6171) Two double periods. Open to all qualified students. The *Chorus* is the Academy's major singing group, comprised of mixed voices, and performs a variety of choral works, both sacred and secular. No previous choral experience is necessary; just a desire to work hard and enjoy a unique choral experience. This course, if failed, cannot be made

up by examination.

18—123 Chamber Orchestra

(6181) Two double periods. Open to all classes.
(6182) Most of the music played is for string orchestra; the best winds in the school are invited to join for larger works. One concert a trimester is regularly scheduled and the orchestra also plays at least once a trimester in the Sunday Chapel service. The membership includes several students from the community who want orchestral experience that is not available in their own schools, and several members of the faculty. While *Chamber Orchestra* may be elected as a credit-bearing course, it is also an activity in which all are invited to participate. This course, if failed, cannot be made up by examination.

19—123 Private Instrument and Vocal Lessons

(6191) Two class meetings plus required concert attendance. Lessons are available on all orchestral instruments including, in addition, piano (classical or jazz), guitar, saxophone, organ, harpsichord, carillon, and voice.

In addition to practicing daily, the credit students are expected to meet the following commitments: 1) a once per week meeting with their private instructor; 2) a once per week seminar, providing a broader practical/theoretical background (credit students would be assigned seminar groups according to their instrument and background); 3) a required attendance of three concerts, on campus, per term.

There is a charge of \$170 per term for half-hour instruction, or \$240 per term for full-period (50 minute) lessons, and a nominal fee for use of practice pianos and organs. Orchestral and Band instruments are available for rental. **NOTE:** Beginners (as defined by the Department) **MUST** take two consecutive terms of *Music 19* if they are enrolled as credit students.

20—1 The Nature of Music

(6201) Five prepared class periods. This course is

20—2 designed to give a general background in

(6202) history, theory, and practical aspects of music. Music from its earliest sources to the present is examined. Also, the role of music and the arts in each of its cultural stages is studied. Students receive some first hand experience with musical instruments. No previous experience in music is required.

20—3

(6203)

- 21—3 skills may be weak. Juniors with no such
(6213) demonstrated weaknesses may take *Music*
20.

HISTORY AND APPRECIATION

The Nature of Music (Music 20 or 21) is a **prerequisite** for all courses in this section.

- 26—123 **Seminar in the History of Music**
(6261) Two class meetings. Open to Lower and Upper Middlers and to Seniors. This course,
(6262) taught in seminar fashion, is one where a
(6263) great deal of reading, listening, and analysis is expected to take place outside the classroom. The composer or composers and era to be studied each term will be decided by the class and the instructor. (Sample topics: Beethoven and the Era of Revolution; The Life, Times and Music of J.S. Bach.) Hours to be arranged.

- 27—123 **Independent Study in the History and Literature of Music**
(6271) Four prepared class periods. Open to Upper
(6272) Middlers and Seniors. A student who has
(6273) taken at least one trimester of *Music 26* may, with the permission of the instructor, pursue an independent course of study in either a particular type of music or a particular period of music.

- 28—3 **Jazz**
(6283) Four prepared class periods. Open to Upper Middlers and Seniors. A study of the history of classic jazz, dating back to its roots in Africa, its development in New Orleans, its spreading to New York and Chicago, and its influence on music today. A survey of ragtime, blues, Dixieland, fox-trot, on through the big band era of the thirties, concluding with the jazz rock of today. A study of the influence and contributions of the major personalities such as W.C. Handy, Jelly Roll Morton, Louis Armstrong, Basie, Whiteman, Gershwin and the rest of the greats.

THEORY

The Nature of Music (Music 20 or 21) is a **prerequisite** for all courses in this section.

- 32-123 **Conducting**
(6321) Hours to be arranged. Open to Upper
(6322) Middlers and Seniors. A course in conducting and basic musicianship. This course is
(6323) designed to give the student an introduction

to the conductor's world through developing conducting skills and score analysis.

33—1 **Theory of Music I**

- (6331) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors.

This course offers an introduction to harmonic progression, triads, modes, rhythmic coordination with dictation. Some original work is also expected.

34—2 **Theory of Music II**

- (6342) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Pre-**

requisite: *Theory of Music I* or permission of the instructor. This course deals with harmonic progressions, modulations, figure bass, and an introduction to counterpoint and harmonic analysis.

35—3 **Theory of Music III**

- (6353) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Pre-**

requisite: *Theory of Music II* or permission of the instructor. This course includes advance figure bass, more complex chords, and a brief introduction to nineteenth and twentieth century techniques.

36—1 **Electronic Music**

- (6361) Four prepared class periods. **Prerequisite:**

- 36—2 *The Nature of Music (Music 20)* or permission
(6362) of the Department Chairman. A course for
36—3 the benefit of those who seek to expand their
(6363) domains of creativity by understanding and utilizing the conceptual approaches inherent

in electronic music synthesizers and related equipment. Using a practical approach, the course begins with the care and feeding of the tape recorder and proceeds to the functioning and operation of electronic music modules. A lab fee of \$15.00 is charged for the use of the synthesizer.

40—123 **Advanced Techniques in Electronic Music**

- (6401) Four prepared class periods. **Prerequisite:**
(6402) *Electronic Music (Music 36)*. A course designed for the continuation of the skills and
(6403) techniques developed in *Music 36*. A lab fee

of \$15.00 is charged for the use of the synthesizer.

Philosophy and Religious Studies

The department seeks to initiate students into three distinctive human quests: the search for

meaning, the search for justice and the search for the foundation of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered at a variety of levels. All courses involve four prepared class periods.

The department diploma requirement is successful completion of any one-trimester course; this requirement applies only to those who attend Phillips Academy for three or four years, beginning with Juniors and Lowers who enter in September 1983.

20—3 The Biblical World View: An Introduction

(7203) Four prepared class periods. Open to Juniors and Lower Middlers. Why was the world created? Why are we humans placed on this earth? What are we like? What should we try to achieve in life? How should we treat one another, other creatures, and the planet on which we live? For many centuries the Bible provided for many people a response to such questions. In our day, however, the message has become both unclear and increasingly unfamiliar. In this course we shall look at the composition and the historical setting of the Bible (Old Testament), then read selected passages of Biblical narrative and reflection which introduce persons and principles central to the Biblical view of the world, its inhabitants, and its Creator. (Rabbi Gendler)

21—1 Introduction to Ethics: Discernment and Decision

(7211) Four prepared class periods. Open to Juniors and Lower Middlers. Rooted in concrete issues and experiences of everyday living this course provides an introduction to the skills of discernment. Drawing case studies from literary and topical sources, bioethics, law and education, the class will critically investigate the often unspoken presuppositions that give rise to moral decision. (Dr. Avery)

23—1 The New Testament Perspective

(7231) Four prepared class periods. Open to Juniors and Lower Middlers. The course will consider, in their cultural and historical context, the person and teaching of Jesus of Nazareth, the development of the early Christian community and the religious claims of that community concerning the Christ. (Fr. Gross)

30—1 Introduction to Non-Western Religions

(7301) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. This course provides a brief introduction to four of the world's major religions: Islam, Hinduism, Buddhism, and Taoism. Huston Smith's classic, *The Religions of Man*, is the text. Additional readings are drawn from basic religious texts of the traditions. (Rabbi Gendler)

32—2 Post-Biblical Jewish Thought: Responses to the Holocaust

(7322) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. An exploration of the holocaust through diaries, memoirs, works of fiction, poetry, and later reflections on the phenomenon. Questions to be dealt with will include: what was it like for the victims? What was it like for the Nazis? How could it have happened? What elements from Jewish, Christian and secular tradition contributed to its possibility? What have been some of its effects on our own feelings about life and human beings? How have various Jewish, Christian, and secular thinkers responded to the challenge of this event? (Rabbi Gendler)

33—2 Understanding Religion: An Introduction

(7332) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. A critical examination of human experiences and practices in diverse religious and non religious contexts, in particular: ecstasy, myth-making, ritual expression and the disciplines of meditation and prayer. Concepts and models of understanding are introduced as useful tools with which to approach the phenomena of religion. (Dr. Avery)

36—1 Proof and Persuasion

(7361) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. A practical introduction to informal logic and to the philosophical study of language. Some of the questions raised are: What is the difference between a good argument and a poor one? What are the common fallacies of Thought? What are the limitations of logic? What is the meaning of "meaning" and the truth about "truth"? The course stresses the development of individual skill in argument and includes a critical examination of the patterns of thought one encounters every day in magazines, newspapers and on television. (Mr. Hodgson)

41—1 Views of Human Nature

(7411) Four prepared class hours. Open to Upper

41—2 Middlers and Seniors, and to Lower

(7412) Middlers with permission of Instructor. A

critical examination of existentialism, psychology, biology, anthropology and transcendentalism in light of the answers they provide to the following questions: Does man have a characteristic nature? What are his basic needs, rights, obligations and values? Is man free? Is man responsible for his actions? Given an understanding of man, how should we structure society to satisfy his needs and take advantage of his potentials? Readings: Jean-Paul Sartre, *Existentialism is a Humanism*; R.D. Laing, *The Politics of Experience*; B.F. Skinner, *Walden Two*; Sam Keen, *Apology for Wonder*. (Mr. Hodgson)

42—1 Bioethics

(7421) Four prepared class periods. Open to Upper

42—3 Middlers and Seniors. The growth of the hu-

(7423) man sciences and their corresponding technologies has increased human control over

and thus responsibility for the development of mankind. The course addresses particular issues of life and death, genetic engineering, behavior modification, human research and the allocation of medical resources. At the same time the underlying issue of the relationship between science and ethics is considered. (Dr. Avery)

43—1 Law and Morality

(7431) Four prepared class periods. Open to Upper

43—3 Middlers and Seniors, and to Lower

(7433) Middlers with permission of Instructor. A

critical examination of an intricate web of problems which arises out of the relationship between law and morality. Questions of concern include: Does society have the right to restrict the behavior of an individual? On what, if any, grounds are such restrictions justifiable? To what degree should society incorporate "popular" morality into law? Is an individual ever morally justified in breaking the law? If so, under what circumstances and in what fashion? Readings include selections from Plato, Hobbes, R.P. Wolff, Lord Patrick Devlin and Martin Luther King, Jr. Specific issues include abortion, pornography, racial and sexual discrimination and civil disobedience. (Mr. Hodgson)

44—2 Nonviolence in Theory and Practice

(7442) Four prepared class periods. Open to Upper Middlers and Seniors. The militarily most

destructive century in human history, our twentieth century, has also been one in which such men as Gandhi and Martin Luther King, Jr., have successfully applied nonviolence to conflict situations. What is the theory of this approach to human conflict? What are some of its psychological assumptions? What is its religious and hu-

man significance? By what means does it operate? What are its prospects for the age ahead? We shall use case histories, the testimonies of those directly involved in such struggles, films, critical and theoretical studies in trying to clarify and comprehend some of these elements of nonviolence. Readings include Joan Bondurant's *The Conquest of Violence* as well as writings of Gandhi and King. (Rabbi Gendler)

45—2 Man's Search for Meaning

(7452) Four prepared class periods. Open to all Up-

45—3 per Middlers and Seniors and to Lower

(7453) Middlers with permission of Instructor. The

reflective person is confronted with questions that hunger to be answered yet elude definitive, "objective" answers. The person's faith is often what sustains him/her and provides "subjective" answers to these fundamental questions. The issues of creation, of death, of evil, of identity, of purpose all challenge one's faith. This course (which takes its title from Victor Frankel's book) will consider these issues from a faith perspective using Scripture, literature (i.e. *Equus*, *No Exit*, *The Little Prince*, *The Shadowbox*, *Man's Search for Meaning*, *I Heard the Owl Call My Name*, etc.) and other materials. (Fr. Gross)

46—2 The Ethics of Food and Development (for-

(7462) merly *Social Science* 320)

Four prepared class periods. Open to Upper Middlers and Seniors. In an interdisciplinary manner, the course will examine patterns of nutrition in different cultures and critically assess various accounts of the extent of hunger, its relative importance as an issue, its causes and remedies. Particular attention will be paid to the values implicit in various methods of food production, population control schemes, land tenure patterns, social and political orders, economic development models and international economic relationships. Students will develop and present a case study of the issue in food and development facing a particular country. (Mrs. Goetze, Dr. Avery)

50—2 Existentialism

(7502) Four prepared class periods. Open to Upper

Middlers and Seniors. The term "existentialism" covers a broad range of attitudes and values that are joined together by an emphasis on human existence. The authors brought together in its name share a characteristic concern for the problems of meaning, identity and choice that confront men and women in everyday life. The lectures, discussions and readings are designed to help us locate and express these problems as they confront each of us in our own lives and to assist in un-

derstanding and resolving them by drawing on the experiences and insights of the major existentialist thinkers. Readings: Nikos Kazantzakis, *Zorba the Greek*; Friedrich Nietzsche, *Thus Spake Zarathustra*; Jean-Paul Sartre, *No Exit* and *Being and Nothingness*; Soren Kierkegaard, *The Sickness unto Death*; Martin Buber, *I and Thou*. (Mr. Hodgson)

- 51—1 In Search of Justice: from Socrates to Marx**
 (7511) Four prepared class periods. Open to Upper
 51—2 Middlers and Seniors. God, emotion, logic,
 (7512) social necessity and economic laws have all
 51—3 been invoked as the final arbiter of justice.
 (7513) The class will examine the major answers to
 the problem developed by Plato, Aristotle,

Mill, Marx and others. The course aims to assist critical awareness of the ultimate criteria of one's own evaluations and those of others so that she/he be better equipped to make her/his own contribution to the never-ending search for justice. (Dr. Avery)

- 52—1 Great Philosophers**
 (7521) The great philosophers challenge us to address difficult and fascinating questions that
 52—3 perenially face mankind: What is the good
 (7523) life? What are the sources of human experience?

Is there anything we can know with certainty? Does God exist? What is the relationship between my mind and my body? This course critically evaluates the responses of Plato, Descartes, Hume and Whitehead. (Mr. Hodgson)

Physical Education

All Juniors and new Lowerers are required to elect one trimester of *P.E. 10* in addition to their regular athletic commitment.

- 10—1 Physical Education**
 (9201) Pass/Fail. Limit of 15 students per section.
 10—2 Five class periods per week. A course integrating health and fitness concepts with self-testing and challenge activities; two class
 10—3 periods per week are spent using the running track, weight room, ropes course and
 (9203)

other areas of the athletic complex. Two class periods are devoted to drown-proofing survival swim technique and C.P.R. training. One period per week is lecture-discussion, requiring some outside reading or other preparation. If the course is failed, the student will repeat it, in full or in part, during a subsequent term.

Psychology

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strategies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained.

- 32—1 Introductory Psychology**
 (7021) One double period and two prepared class
 32—2 periods; for Uppers and Seniors. A survey
 (7022) course designed to introduce the student to
 32—3 the complexity and diversity of psychological
 (7023) inquiry. Emphasis is placed on the application of basic psychological principles to individual

experience in order to expand awareness of both self and others. In addition, the broader implications of psychological findings for an integrated understanding of human development and behavior are considered. Topics to be covered include: psychoanalytic, behavioral and humanistic theories of the person, psychosocial, cognitive and moral development, human motivation and personality, abnormal behavior and dreams. Lectures are designed to catalyze discussion. A combination of objective examinations and individualized writing assignments are utilized to evaluate the student's learning. (Dr. Marlowe)

- 33—1 Human Sexuality**
 (7031) One double period and two prepared class
 33—2 periods; for Uppers and Seniors. This course
 (7032) is designed to help students understand the
 33—3 facts of sexuality from the biological, social
 (7033) and psychological points of view. While
 there is sometimes a tendency to separate

mind from body, the perspective of the course is that mind, body and psyche are all involved in sexuality, often in complex and mysterious ways. In addition to the biological facts, topics to be covered include misconceptions and mythologies of sexual growth and development.

ment, masculine and feminine psychology, varieties of intimate relationships and variations in sexual life styles. There is a strong emphasis on discussion in class and self-reflection. In addition, the format of the course includes readings, films, case analysis, quizzes and a final paper. (Ms. Jackson)

40—2 Human Relationships

(7102) One double period and two prepared class

40—3 periods; for Uppers and Seniors. Pass/Fail.

(7103) **Prerequisite:** one previous psychology course, or consent of instructor. The many

dimensions of human relationships are explored. Emphasis is placed on assisting the student to articulate his or her emerging psychological awareness of personal and social relationships. Primary source readings and structured experiential exercises are used to develop an understanding of psychological concepts as rooted in individual experience. Topics to be considered include: core human conflicts, characteristics of the healthy individual in relationship to others, how power, body language and family communication styles shape relationships, and the impact of social structures on intimate relationships. This course, if failed, cannot be made up by examination. (Dr. Marlowe)

42—2 Group Theory and Process (Not offered in

42—3 1984-85.)

Two double class periods; for Uppers and Seniors. Pass/Fail. **Prerequisite:** one previous psychology course or consent of instructor. The topic for study in this course is human behavior in small groups. Human beings do most of their living, working and playing in small groups ranging in formality from family to classroom groups. The relationships among the members of these groups develop through similar stages and by common processes which determine to an important extent the effectiveness of the group in achieving its goal. These stages and processes are a response to two basic human needs: the need for belonging and community, on the one hand, and the need for separateness and individual identity, on the other. The classroom group provides students with a laboratory in which to experience and observe group process. Students read articles in the professional literature and write papers on topics that reflect upon their learning. This course, if failed, cannot be made up by examination.

Science

Since Andover students arrive with various levels of experience in science, there are courses offered

in biology, chemistry and physics at several degrees of sophistication. The courses are arranged so that a single course may be taken in any of the three major fields at a level appropriate to the aptitude of the student, or several courses of increasing difficulty may be taken should some degree of specialization be desirable for certain students. There are also available introductory science courses (*Science 10-18*) for Lower and Juniors and some other specialized courses (*Science 31-35*) for Uppers and Seniors.

In general, students are encouraged to take a variety of courses in physical and biological science and not to specialize in a single branch of science. For students with special interests, individual project work for credit is open to Seniors on a pass/fail basis and is arranged through the office of the Dean of Studies.

Although a single laboratory course in biology, chemistry or physics at the 20 level or above prepares the student for the College Board in that subject and meets the diploma requirement in science, students are encouraged to take more courses in science to broaden their base of scientific awareness and to broaden career options. There are courses available in Biology, Chemistry and Physics which prepare students for advanced placement examinations in each science.

Science Introductory Physical Science

10—0

(8000)

Four class periods. Open to Juniors with limited backgrounds in science. The course will deal with some of the basic concepts of physics and chemistry by means of classroom work, problem solving, and laboratory experiments.

Science Chemistry for the Biological Sciences

11—2

(8012)

Open to Juniors. Four prepared periods per week. This course is designed for students who have no background in chemistry and are planning to take *Biology 30*. Topics such as acid-base chemistry, bonding, shapes of molecules, the mole concept, and elementary organic chemistry will be covered. There will be laboratory work.

Science Oceanography

15—2

(8052)

Four prepared class periods. This is an introductory science course designed primarily for Juniors and Lower who have not taken

Biology 25 or 30 or their equivalent. The 70% of our earth's surface comprising the oceans is examined from a number of physical, chemical, and biological perspectives. Accordingly, we investigate aspects of sea-water chemistry, mechanisms of wave propagation and current generation, and interactions among the thousands of living organisms found in or near the sea. Films and slides complement the classroom portion of the course.

Science Ecology

16—3
(8063) Four prepared class periods. Open to Juniors and Lower Middlers. The course is designed to introduce students to the basic concepts of ecology. The material offered explores the meaning of interdependence and interrelationships within environment; population dynamics; trophic levels and energy; adaptation; succession; and the impact of man upon his environment and some of the problems caused by his use and abuse of basic resources. Class material is coordinated with and reinforced by laboratory studies of population growth, computer programs to study environmental problems and pertinent field trips. One of the major objectives of the course is to develop within the student an understanding of and sensitivity to the balance and beauty of nature.

Science Introduction to Zoology

17—2
(8072) Four prepared classes per week, one of which will be used for laboratory work. This is a one-term course designed for Juniors and Lowers who have not taken *Biology 25 or 30* or their equivalent. A study will be made of the similarities and differences among the major animal divisions from the most primitive invertebrates to the most complex vertebrates. Areas of concentration will include the basic systems of each phylum (*i.e.*, digestion and reproduction), as well as the ecological role and the evolutionary development of the organism. Lab periods will be used to develop techniques of dissection while studying the anatomy of animals from selected phyla.

Science Introduction to Observational Astronomy

18—3
(8083) Four prepared class periods, with one period each week used for observation. This course is intended for Juniors and Lowers who want to become familiar with the universe in which we live. Topics include a survey of the sky, lunar observation, the origin of the solar system, celestial distances and motions, and a brief introduction to stellar evolution. Students identify constellations, track planets, and learn how to observe using a telescope.

Science Observational Astronomy

31—1
(8511) Four prepared class periods, with one period used for observation each week. This course is designed for Uppers and Seniors who are interested in a college level survey course in modern astronomy from the earth to the stars. Topics include celestial measurements and coordinates, solar astronomy, planetary science, with particular emphasis on stellar evolution from gaseous nebula to dwarfs, red giants, white dwarfs, neutron stars, and black holes. Observational projects involve the naked eye, binoculars, telescopes in Thornton Observatory and astrophotography. Not open to students who have had *Science 18*.

Science Cosmology

32—2
(8522) Four prepared class periods. This course is open to Uppers and Seniors. Cosmology is the study of the universe as a whole, and its evolution. Topics include galactic structure and large organization in the universe, modern theoretical models, physical evidence, the standard model of the Big Bang, galactic evolution, the search for extra-terrestrial life, and the future of the universe. Telescope observation, movies, guest lectures and a field trip augment the course.

Science Electronics

33—3
(8533) Four class periods per week. Prerequisite: previous completion of or concurrent enrollment in a Physics course, enrollment in at least *Math 30*, and permission of the instructor. A course in modern solid state linear and digital electronics leading to a fundamental understanding of microcomputer hardware through consideration of circuit elements and their combinations, operational amplifiers, various types of diodes and transistors, integrated circuits, and Boolean algebra and its implementations. There will be considerable laboratory work.

Science Geology

34—3
(8543) Four prepared class periods, with two periods used each week for laboratory work. A general introduction to physical geology, to include crystal growth, minerals, measurement of geologic time by radioactivity and fossils, volcanoes, seismology and earth structure, deformation of strata, faults, plate tectonics. Some attention to disasters of geological origin, *e.g.* earthquakes, tidal waves, eruptions.

Biology

The Biology department offers two year-long introductory level courses, each of which satisfies the

diploma requirement for a laboratory science. Each course meets four times a week for 3 classroom periods and one double-period laboratory session which includes training in the use of the compound and stereoscopic microscopes and other laboratory equipment. Laboratory work requires careful observation, mastery of techniques and accurate recording and interpretation of results. Part of the spring term is set aside for work on individual or group laboratory projects. Juniors who wish to enroll in either *Biology 25—0* or *Biology 30—0* MUST obtain permission from the Department Chairman.

A student entering Phillips Academy as a Lower, Upper, or Senior who wishes to receive credit for and exemption on the strength of a course taken in the 9th grade at another school may do so upon passing a validation test to be administered after the student arrives at Andover.

25—0 Elementary Introduction to Biology

(8100) This course is intended primarily for Lower Middlers with little previous exposure to science. A topics approach usually centered around laboratory experiences is employed in order to acquaint students not only with fundamental biological principles but also with the methods and techniques used to elucidate them. Attention is paid to the processes by which scientific evidence is gathered, interpreted, and summarized. (This course is not open to Seniors.)

30—0 Introduction to Biology

(8110) This is a survey course for those students with previous exposure to some of the basic principles of science. It stresses the unity of life, rather than the diversity, by emphasizing the functions common to all living things. It covers, in plants, animals, and microorganisms, the fundamental principles of metabolism (including nutrition, gas exchange, materials transport, excretion, and homeostasis), responsiveness and coordination, reproduction and development, genetics, evolution and ecology.

The following four term-contained courses are designed for those students who would like to take biology beyond the 25 or 30 level. For those students who wish to take the Advanced Placement Examination, we recommend taking *Biology 41*, *43*, and *44*. (A year of Chemistry and/or Physics is also strongly recommended.) These courses, however, are not designed exclusively for students who wish

to take the biology A.P. Exam. *Biology 25* or *30* or their equivalent is *required* for all 40-level Biology courses.

41—1 Evolution and Ecology

(8131) Five prepared classes per week. The major unifying theme in the study of biology is that all life has evolved from a common ancestor. This course will discuss the ideas of the pre-evolutionists, Darwin, and the neo-Darwinists. The mechanism of natural selection will then serve as a foundation for the discussion of the basic concepts of ecology such as the ecosystem, energy flow, succession, and relationships between populations. Problems of societal concern such as environmental ethics and our altering of our own evolution will also be discussed. A project or a research paper will be required. (This course, *Biology 43* and *Biology 44*, form an Advanced Placement sequence.)

42—1 Animal Behavior

(8141) Three class periods and one double laboratory period. The course is designed to familiarize the student with the basic principles of animal social behavior. The topics which receive the greatest emphasis are: territoriality, altruism, mating strategies, courtship, parental behavior, migration, dominance, and the evolution of behavior patterns. Throughout the course, an effort is made to relate the behavior of animals to the behavior of humans. A project or a research paper will be required.

43—1 Molecular Biology

(8151) Five prepared classes per week. Following a brief review of chemical principles, the course examines the major classes of biomolecules and how they are synthesized and degraded in the cell. Particular emphasis is placed on those reactions which are associated with energy conversion pathways such as respiration and photosynthesis. Enzyme function is considered both in terms of mechanisms of action and with regard to kinetics. The relationship between structure and function at the molecular level is emphasized in studies of the plasma membrane, gene interaction, and control of genetic expression. (This course, *Biology 41* and *Biology 44*, form an Advanced Placement sequence.)

44—1 Human Physiology

(8161) Five prepared classes per week. An in-depth consideration of the major systems of the human body. All lab work will be done during a two-week period, devoted solely to the dissection of a cat (or rabbit) and to microscopic slide study of the major tissues of the

human body. A fully documented research paper will be required. Text: *The Mechanisms of Body Functions*, by Vander, Sherman & Luciano. (This course, *Biology 41* and *Biology 43*, form an Advanced Placement sequence.)

Chemistry

25—0 Elementary Introductory Chemistry

(8210) **Prerequisite:** Completion of *Mathematics 10* or the equivalent. For Lower Middlers and Upper Middlers who have NOT completed their Phillips Academy mathematics requirement. Three recitation periods and one double laboratory period. The course includes a systematic study of matter and the changes it undergoes — with the spring term devoted to organic chemistry. Emphasis is placed on the reasoning involved in the development of modern theory and general concepts rather than memorization of descriptive chemistry. Laboratory work is closely related to topics covered in recitation.

30—0 Introductory Chemistry

(8220) **Prerequisite:** Completion of *Mathematics 20* or the equivalent. Three recitation periods and one double laboratory period. The course is designed for students with more maturity and mathematical background than those taking *Chemistry 25*. As in that course, the modern theoretical framework of chemistry is emphasized, and the laboratory work is closely related to topics covered in recitation. These topics are treated in greater depth and with more emphasis on quantitative rather than qualitative answers. Less time is spent on organic chemistry than in *Chemistry 25*.

41—1 Introduction to Chemistry

(8231) Three recitation periods and one double laboratory period. For Seniors who have not had a course in chemistry. This course covers the basic principles of chemistry — such as the periodic table, chemical bonding, acid-base chemistry, the pH scale, and simple chemical arithmetic. Emphasis is placed on examples from organic and biochemistry. In addition to the text there will be assigned articles from the "Scientific American". (Dr. Minné)

42—2 Research in Chemistry

(8242) **Prerequisite:** At least *Chemistry 25* or *Chemistry 30* completed with distinction, and permission of the instructor. One prepared period and three unprepared, double laboratory periods, or the equivalent.

Each student selects a research project in consultation with the instructor and then carries out the necessary work. (Dr. Minné)

43—3 Elementary Organic Chemistry

(8253) **Prerequisite:** Completion of either *Chemistry 25* or *30*. Three recitation periods, and one double laboratory period. Students interested in medical or biological fields or in additional chemistry must generally wait until the college sophomore year before studying organic chemistry, the chemistry of carbon compounds. This course is a prior introduction to this critically important and fascinating subject.

Organic chemistry is largely non-mathematical and descriptive in nature. Students will use a condensed "minicourse" text, learn many of the laboratory techniques unique to organic chemistry, make use of three-dimensional plastic molecular models, and gain a sound background in nomenclature, functional groups, bonding, simple mechanisms, typical reactions, and infra-red spectra. (Dr. Minné)

46—2 Chemistry of Nutrition

(8262) **Prerequisite:** One year of biology, chemistry, or physics. Four prepared periods per week. This course will investigate the connection between diet and health (or disease) and the chemical basis for such connections. Such issues as, "Is sugar bad?", "How much protein and what sort is needed for a healthy diet?", and "Is a low fat diet more healthy?" will be discussed. Chemical topics will include the structure, biological functions, and reactions of carbohydrates, fats, proteins, vitamins and additives. The energetics of metabolic pathways and of "energy rich" molecules will also be discussed. (Ms. Ballard)

52—23 Advanced Placement Chemistry (T2) (a two-term commitment)

Prerequisites: *Chemistry 25* or *Chemistry 30* completed with distinction and a year of physics, which may be taken concurrently. Four recitation periods and one double laboratory period. The course is for students who wish to prepare for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board. (Dr. Minné)

55—0 Honors Introductory Chemistry—Advanced Placement

(8280) **Prerequisite:** One year of physics. Three periods for recitation and two double laboratory periods. This course is open to a limited number of able students, by invitation, who have strong scholastic records in mathematics and physics. No prior course in chemistry

is expected. It is essentially the equivalent of a first-year college course, and prepares students for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

Physics

20—0 Physics Honors for Juniors

(8300) Four prepared class periods. **Co-requisite:** Registration in *Math 19* or *Math 20*. This is an honors course for talented Juniors with a strong interest and background in science and mathematics. Students entering this course should have mastered a year of algebra as it is used profusely in solving word problems. There is laboratory work. Successful completion of this course prepares students for *Physics 55*. The text is *Physics* from the Physical Science Study Committee.

25—0 Physics

(8310) Five class periods, one unprepared. Open primarily to Lower Middlers. An introductory course in the basic concepts of physics. A less rigorous course than *Physics 30*, it is designed for students with latent mathematical maturity. Students should have completed one year of algebra before enrolling. Successful completion of the course prepares the student for the College Board Achievement Test in Physics.

30—1 College Physics

(8321) Five class periods. **Co-requisite:** Registration in at least *Mathematics 30* or its equivalent. A non-calculus, B-level Advanced Placement physics course for students with ability in mathematics and science, this first term is a study of classical mechanics (including rotational dynamics and physical pendula), with extensive laboratory work an integral part of the course. *Physics 30—1* (or equivalent) is a **prerequisite** for *Physics 30—23* (T2). Text: *College Physics*, by Franklin Miller.

30—23 College Physics (T2) (a two-term commitment)

Prerequisite: *Physics 30—1*. Five class periods. Wave motion, heat, kinetic molecular theory, thermodynamics and electrostatics in Winter Term. Electrodynamics (including magnetism), geometrical and physical optics, early atomic and nuclear theory in the Spring Term.

52—12 Advanced Physics (T2) (a two-term commitment)

(8374) Five class periods. **Prerequisite:** An honor grade in *Physics 30* or its equivalent and enrollment in at

least *Math 51* or its equivalent. This is a rigorous course in mechanics (fall term) and electro-statics and dynamics (winter term). Calculus will be used as required. This course generally prepares candidates for the C-level Advanced Placement Examination in Physics and entrance to honor level programs in physics at the university level. Text: *Physics*, by Resnick and Halliday.

55—0 Physics Honors

(8380) Four prepared class periods and one double laboratory period. Open to talented students who will be enrolled in at least *Math 51*, may have taken a chemistry course and need not have taken any previous physics. If you are interested in this course, you may sign up for it with your academic advisor in the spring or you may request it on your course registration form. The department chairperson will then review your credentials and invite you to join the course or suggest you enroll in *Physics 30*. *Physics 55* prepares students for the C-level Advanced Placement Examination and is a rigorous course emphasizing mechanics and electro-statics and dynamics. Text: *Physics* by Resnick and Halliday.

60—3 Relativity and Quantum Mechanics

(8393) **Prerequisites:** *Physics 30* and *Math 52*. Four prepared class periods. Relativity and Quantum Mechanics are two theories that completely revolutionized man's thinking about the universe. The course is a survey of the basic ideas underlying these theories. Special mathematical techniques needed for a better understanding of the material are developed in the course.

Theatre and Dance

All courses are electives, open to the various classes as noted. Courses in theatre are designed for students who wish formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work in productions. A variety of experiences is available: some courses result in performance; some courses study theory; some do both. Theatre students are encouraged, though not required, to supplement their classwork by participating in any of the numerous productions mounted each year, or they might be invited to join the Andover Touring Company, which has produced and toured with *Our Town*, *The Fantasticks*, *Scenes from American Life*, *A Thurber Carnival*, *Godspell*, *The Contrast*, *J.B.*, and *The Skin of Our Teeth*.

THEATRE COURSES

21—1 Introduction to Acting

- (6511) Four class periods and one hour of movement. Not open to Juniors. This course is designed for students with little or no acting experience. By doing exercises in movement and voice production, reading, improvisation, and scenes, a student who is curious

about the theatre may determine whether he or she has ability or interest in acting, while learning something of the process of characterization, the major responsibility of the actor. The emphasis is on the variety of acting experiences rather than on a polished final product. One required trip to a nearby theatre. Text: Hagen, *Respect for Acting*.

22—1 Public Speaking

- (6521) Four class periods. Not open to Juniors. The course has a dual objective: to learn how to speak easily in front of others, and to learn how to speak English well. Students give prepared and extemporaneous speeches on a variety of topics while studying diction,

pronunciation, projection, organization, and other techniques of good speaking.

26—23 Technical Theatre

- (6562) Two double periods. Open to all classes.
(6563) Through practical experience in designing, building, and lighting for plays currently being

produced, students learn the elements of stagecraft, including set construction, stage rigging, and the use of lighting instruments and gels. For the Winter Trimester emphasis will be on stagecraft; for the Spring, lighting.

28—1 Shakespearean Workshop

- (6581) Four class periods. Open to all classes. An intensive study of several plays by Shakespeare, with the major emphasis on the spoken word. Close attention is given to pronunciation, diction, rhythm, dynamics, and interpretation. Students read aloud, act, memorize, and record scenes and soliloquies. Anyone who plans to audition for Theatre 52—2 might consider this course.

32—2 Intermediate Acting

- (6622) Four class periods. **Prerequisite:** Theatre 21, or departmental permission. Building upon the principles of acting introduced in Theatre 21, this intermediate acting course consists

of detailed scene work and improvisation, exploring the relationship of the actor to his audience and to his fellow actors and focusing on the creation of dramatic moments, both with and without scripts. The course considers various acting styles, in an effort to guide the actor toward a greater understanding of his responsibility on stage: to see to what degree he can remove himself from himself while creating truthful characterizations.

51—1 Acting and Directing Workshop

- (6711) Two double periods. **Prerequisite:** Theatre 21 or 32, or departmental permission. Uppers and Seniors only. The course serves two kinds of students: those who wish as actors to study plays and characters in greater depth and those who wish to study the principles and techniques of directing, the most complex of theatrical tasks. While everyone will do some acting, only those people who express a desire to experiment with directing will do so. Class members work with manageable scenes from classical and contemporary periods, reading theories of acting and directing, studying various performance styles, and examining methods of scene interpretation.

52—23 Play Production

- (6722) Four double periods. By audition. This course is oriented toward the performance of a significant work by an important playwright. Recent choices have been *The Sea Gull*, *The Little Foxes*, *Macbeth*, *As You Like It*, *The Hostage*, *Hamlet*, and *Ten Little Indians*.

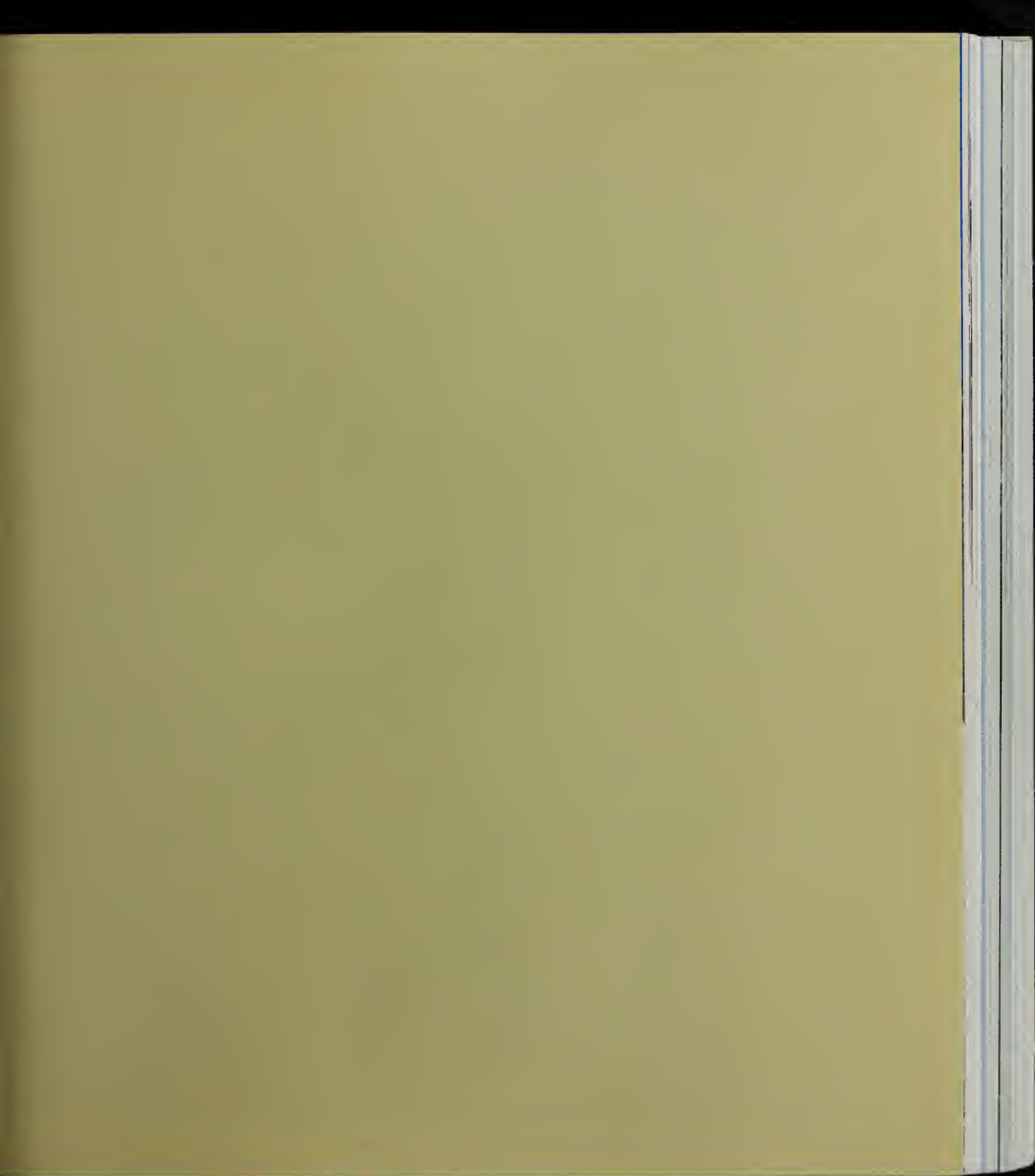
53—2 Playwriting

- (6732) Four class periods. Open to Uppers and Seniors. Each student is expected to write at least one one-act play in addition to certain exercises in monologue, dialogue, and scene setting. The class reads aloud from students' work-in-progress while studying the formal elements in plays by important playwrights and by reading selected literary criticism focused on drama.

DANCE

25—123 Introduction to Dance

- (6801) Four prepared class periods. Open to all classes. A formal course in movement and composition which introduces the serious student to the vocabulary and other elements of dance through active participation. The emphasis is not ultimately on public performance, but on the process and the discipline of modern dance. (Ms. Brecher)



Phillips Academy
Andover, Massachusetts 01810

Andover

Catalog 1985-86



The material in this catalog is intended to provide general information concerning Phillips Academy, Andover, rather than a complete record of any one year. It is not in any manner contractually binding, and the information herein is subject to revision and change.

Andover

Catalog



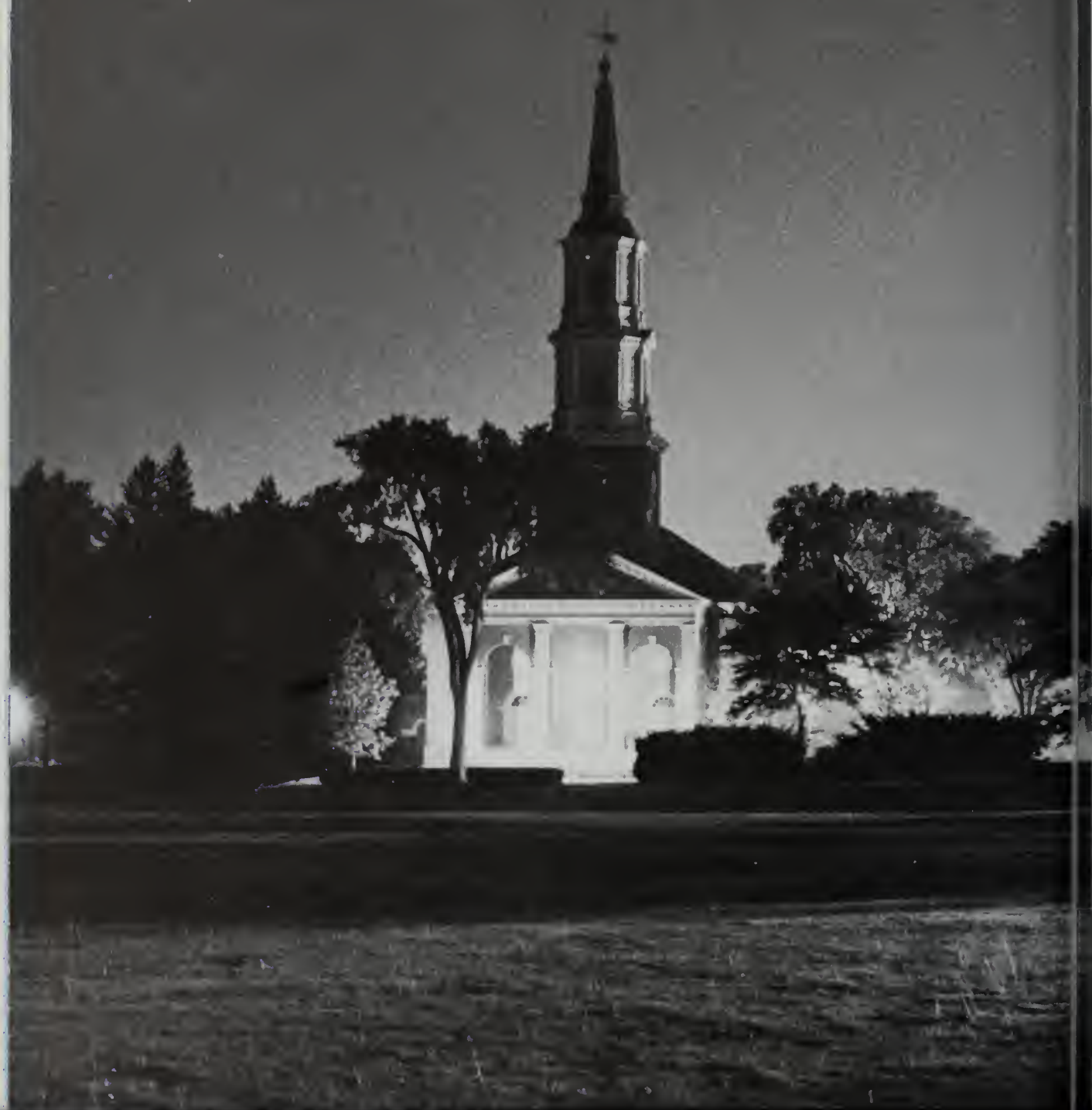
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Phillips Academy,
Andover, Massachusetts,
better known as Andover,
is an independent,
coeducational, integrated
and non-sectarian
institution offering a
variety of academic
programs for high school
students.

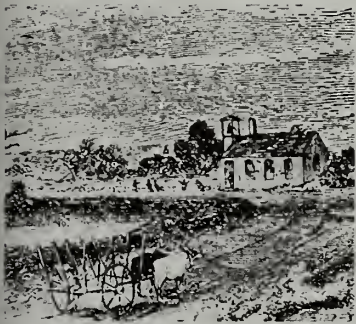


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Introduction to Andover



Phillips Academy in 1778

In 1789 the first scholarship monies are recorded, from John Phillips, "in consideration of further promoting the virtuous and pious education of Youth, (poor children of genius and of serious disposition especially) in Phillips Academy, founded in Andover, Massachusetts."

When Phillips Academy opened in 1778, midway through the American Revolution, there was little reason to feel that the future held bright promise. The war with England was going badly. There was as yet no stable government for the new American nation, nor any surety that stability and social order would return after the revolution. Yet these very dangers convinced twenty-six-year-old Samuel Phillips, Jr. that just such a venture as the Phillips School was required to educate wise and pious leaders for the new nation. For, as he wrote: "Upon the sound education of children depend the comfort or grief of parents, the welfare or disorder of the community, the glory or ruin of the state." Young Phillips (who also was making gunpowder for Washington's army) convinced relatives and friends to put up money and land, and he drafted the Constitution for a school to train the minds and morals of youth for leadership and service. It was to be a sturdily democratic school, for the Founders set this mandate in the Constitution: "This Seminary shall be ever equally open to youth, of requisite qualifications, from every quarter." On April 30, 1778, thirteen pupils met Master Eliphalet Pearson in a refitted carpenter's shop on our Andover campus. Phillips Academy had begun.

Andover today has grown from thirteen boys to twelve hundred boys and girls, from one rude shed to a campus of many acres where extraordinary modern facilities mix with school buildings more than one hundred and fifty years old. Yet the educational values of Andover, even its governance, remain strikingly close to those set forth by the founders. The insistence on academic excellence and moral education, and a diverse student body drawn from able "youth from every quarter," are ideas as appropriate today as in the Revolutionary age in which they were conceived.

In 1973 neighboring Abbot Academy, (est. 1829), one of the nation's oldest and most distinguished girls' boarding schools, was merged with Phillips. After nearly two hundred and one hundred fifty years, respectively, of single-sex education, the two historically linked academies joined their adjacent campuses and educational strengths to effect a single coeduca-

tional academy. The gratifying success of the decade of coeducation, and during that time the Academy's 200th birthday celebration, have made Andover and its academic program known to an increasingly widespread public.

We serve some two thousand young people, most between fifteen and eighteen years of age, at the Academy during the course of a calendar year. Some twelve hundred students are at Andover during the traditional school term for periods up to four years. Over eight hundred more spend the summer with us in the Andover Summer Session or various programs and institutes under its umbrella. While the students in our day are drawn from a narrower age group than earlier — Eliphalet Pearson faced both a six-year-old and a thirty-year-old in his first class in April of 1778 — their hopes and worries, many of the decisions they face, even their pranks, are timeless.

It should be a privilege to attend Andover, but Andover should not be a school of privilege. We are committed to enrolling able students from all economic levels, from every racial, religious and ethnic entity, "from every quarter" of American life, and from foreign lands. Our *Constitution* bids us do this. Andover is no single group's sanctuary. In a day when many Americans, by their actions, are rejecting even the ideology of the melting pot, we assert it.

Andover is a residential school, a twenty-four-hour learning community. This allows us to draw young people from across neighborhood lines, across state and national boundaries. Young people learn from peers as much as from teachers, particularly in a setting where there is no disjuncture between classroom and street, between school and home. Class, racial, religious and geographic diversity enrich a school and bridge over the divisions that rend national and international life. We presume to forward the learning of leaders here, and leaders in our day must understand racial, social, national and religious differences, and see for themselves how significant is the unity in humanity.

Andover is well equipped to provide for students whose interests and abilities are primarily in the academic realm, in the traditional liberal curriculum. We believe that the core of this tradition is sound. When taught with high expectations and global perspective, this liberal arts core provides the basis for public and moral leadership.

In a school the principal means to achieve these ends are decent, free and talented teachers. Andover's teachers are strong personalities, individuals of energy and well-considered values, instructors whose work is in the classroom, and also on the playing field, in the dormitory, in the dining hall — in short, across the full range of places where both adult and young person meet. American education is moving

away from such a model of teacher. In the mistaken belief that "efficiency" will result, teaching is broken into mechanistic bits. Andover makes a stand for the other, older tradition, for whole teachers who are concerned about whole pupils, their struggles and joys, their bodies and souls as well as their brains.

The adolescent years are the crucial time for success in education, those years when young people learn much about themselves, establish their personal goals and visions for the future, and build the courage to lead, to march to the tune of a different drummer. Now we at schools are educating the leaders for the 21st century. We must help them achieve the habits of excellence, broad understanding and a commitment to service. Like the founders of this school, we take youth, and adolescent education, seriously. For as they wrote in our school Constitution more than two hundred years ago: "Youth is the important period, on the improvement or neglect of which depend the most important consequences to individuals themselves and the community." For the young people who join our Andover school community, we want it to be a challenging, constructive and joyful experience.





Andover Life

A Beginning



In 1782 Paul Revere was commissioned to make the Phillips Academy seal. Revere engraved the educational faith of Andover's founders — "The end depends upon the beginning" — around the symbols of the rising sun and the hive of industrious bees. The founders' religious and patriotic commitment to the common good is symbolized by the second motto, "Non sibi" — "not for one's self."

A Purpose

Phillips Academy opened for instruction shortly before the Continental Army marched out of Valley Forge and, in one sense, the school and the nation have grown up together. Paul Revere engraved Andover's seal; John Hancock signed its Act of Incorporation, and George Washington sent his nephews here to study. Samuel F. B. Morse and Oliver Wendell Holmes were students of Principal John Adams. Harriet Beecher Stowe lived and worked at Andover; she is buried in the Academy cemetery, and her home is now a dormitory. "America" was written on Andover Hill in 1832. For over two centuries we have sought to develop sound scholarship, character and self-reliance in our students, as well as a commitment to work for the good of the nation and mankind.

If you come to Andover today, you won't have to go far to see a building designed by Charles Bulfinch or one named for Nathan Hale. You will take classes in a modern arts and communications center, an archaeology museum and in buildings dating back to the War of 1812. You might live in a dormitory constructed in 1808 or one built in 1973. Your next door neighbor might be from Texas or the People's Republic of China. You might take Greek and advanced computer programming, or Russian and astronomy. You might learn how to play squash, discover what it's like to work for a radio station or how to run rapids in a kayak or canoe.

The opportunities are here.

The Phillips Academy faculty, meeting in the winter of 1979, adopted the following as a statement of goals and intentions:

Phillips Academy is committed to providing a rigorous academic education for qualified "youth from every quarter," as stipulated by our Constitution, and to helping students develop the skills and values necessary for personal fulfillment and a significant contribution to society. The Academy strives to meet this commitment in several ways: recruiting aggressively and welcoming qualified and prom-



Always speak to an Andover man on the street, whether you know him or not. All cheering is under the direction of the cheerleaders. Individual cheering is not allowed. New men are expected to have the songs and cheers perfectly learned by the end of the first two weeks. It is not good form to cut or mark school furniture. Try to keep enlarging the number of your acquaintances, but be slow to make intimate friends.

Selections from 1920's rule book, *Customs and Points for New Men*



ising students from a wide range of ethnic, economic, and geographic backgrounds, in the belief that diversity itself can be an enriching component of education; providing a strong curriculum in intellectual and artistic disciplines to cultivate a vision of man's potential as well as an understanding of his accomplishments, and to establish a basis for further exploration and perhaps eventual specialization; offering a diversified program in competitive athletics and physical education to foster physical agility, endurance, and resilience, as well as an appreciation of physical achievement and the notions of play and sportsmanship; developing a program in health to promote an understanding of and respect for physical and emotional well-being and to encourage sound health habits; encouraging the study and exercise of religious beliefs, as a means of spiritual nourishment; offering experiences in leadership within the community, in order to develop responsibility, resourcefulness, and social concern; and providing innovation and a measure of leadership in secondary education, a responsibility dictated by our combination of independence, resources, and tradition.

The Place

The school is located on a hilltop in the town of Andover, a 35-minute bus ride from Boston and Cambridge. It is well situated for easy access not only to the historical, cultural and entertainment offerings of the Greater Boston area, but to the beaches and mountains for which northern New England is justly renowned.

Phillips Academy was the first boarding school to be incorporated in the United States (1780). During its more than two centuries the school has grown in size from a single rude building and a few acres of land to an extended campus of 160 buildings on over 500 acres.



The People

Students

There are approximately twelve hundred students in Andover's regular session, about forty percent girls, sixty percent boys. Day students comprise about one-fifth of the enrollment. More than eight hundred others attend the various programs and institutes of the Academy's Summer Session.

Andover students come from every walk of life, from virtually every state in the union and from more than twenty foreign countries. They are divided into four classes: Seniors, Upper Middlers, Lower Middlers and Juniors — our traditional terms for 12th, 11th, 10th and 9th graders. Some are here for four years, most for a shorter time, but they all have two things in common: intelligence and the willingness to use it.

Faculty

The faculty number approximately two hundred; two-thirds hold advanced degrees at the master's level or higher. The power of an Andover education flows directly from their scholarship and classroom teaching.

Andover asks much of the men and women who teach here: although the heart of the work is in the classroom, tradition calls for the teacher to serve simultaneously as House Counselor or student advisor, coach and/or part-time administrator. Andover teachers are accessible to students in the dormitory, in athletic endeavors, in extracurricular activities; they share an abiding interest in the growth of young people and a willingness to become directly involved in that process.



A year, a week, a day

Andover operates on a trimester system, offering about 285 separate courses that vary in length from one trimester to the full year. The year begins in late September and ends in mid-June, with breaks at Thanksgiving, Christmas and in the early spring.

Classes are held on Monday, Tuesday, Thursday and Friday, the full class days, and on Wednesday morning and every other Saturday morning.

Wednesdays and Saturdays are half holidays with no afternoon academic appointments. On alternate Saturdays there usually are no morning classes and Sunday is totally free. This flexible weekly schedule provides time for independent study, for special projects, for informal sports, shopping in Andover or trips to Boston, the beach or the mountains. Social events during the week are limited by the demands of the academic program, but the weekend program on campus includes dances, concerts, movies, plays and informal activities.

Participation in athletics is required of all students, and athletics and activities are scheduled four afternoons a week for two hours each. On Wednesday and Saturday afternoons, varsity and junior varsity teams often participate in interscholastic competition.

Meals are served in Commons, our fifty-year-old central dining hall, composed of four handsome, traditional dining halls and two completely modern serving areas. The cost of meals is included in the fees of both boarding and day students.

The Daily Schedule

7:15 a.m.	Commons opens for breakfast
8:00 a.m.-	Five 50-minute morning Class Periods. A student is likely to have four morning classes, each meeting four or five times a week.
1:00 p.m.	
11:00 a.m.-	Lunch at Commons
1:30 p.m.	
1:45 p.m.-	Sports
3:45 p.m.	
4:10 p.m.-	Two afternoon Class Periods: most students have one afternoon class.
6:10 p.m.	
5:15 p.m.	Commons opens for supper.
6:45 p.m.	Evening activities: Chorus rehearsal, Drama Lab plays, club meetings, etc.
8:00 p.m.	Evening Study begins
10:00 p.m.	Students in own dorm

An individual student is likely to have one morning period and one afternoon period free each day, depending on course and laboratory schedule.

Most students are eligible to take a day excuse each week and, after the first two weeks of the year, overnight excuses beginning after their last scheduled weekly appointment.

Course work is intensive and involves about twenty-five hours of outside preparation each week. Required athletics or afternoon activities total approximately six hours each week. In addition, all students are required to participate in the school's work program, performing assigned tasks, supervision or leadership responsibilities two hours each week. Despite the amount of time that must be spent on academic pursuits, most students become very involved in extracurricular activities and social events. The school encourages independence and personal responsibility: there are study hours but no study halls, and decisions about the use of one's time are largely left to the judgment of the individual.





Residential Life



Dancing was forbidden in the 1820's, "and when a rash Frenchman proposed to start a dancing academy in the town, the Principal [John Adams] did his best to have him summarily ejected by the village fathers."

Claude M. Fuess, *An Old New England School*

Dorms and Clusters

Boarding students live in dormitories with faculty House Counselors and their families. Although these buildings vary in size and house from four to twenty-four students, all are small enough to encourage close relationships among students and between students and House Counselor. One-third of the students live in single rooms; two-thirds have one or two roommates. Rooming arrangements vary from large one-room doubles to three-room suites; large dorms are likely to have students from at least three classes.

For many students, dormitory life is one of the most valuable aspects of their time at Andover. Whether it's planning a pancake breakfast or studying for a history mid-term, sharing it with people from very different backgrounds or from foreign lands is a rewarding learning experience.

Dormitories are grouped into six geographical units called "Clusters," each including girls' and boys' dorms, about two hundred students from all classes, and twenty to thirty faculty families. Clusters create the personal atmosphere of a small community in which everyone knows everyone else and people do most or many things together. The Cluster System is the heart of Andover's residential life, bringing the advantages of a small school to an institution that already has the advantages of size.

The Clusters have considerable independence; teachers and students together manage their own affairs under the leadership of a Cluster Dean. Each Cluster has its own student officers, discipline system, intramural athletics and informal social activities.

A faculty member is responsible for administering the student work program, which is designed not only to develop a sense of community responsibility for the daily operation of the school, but also to help the school reduce its operating costs. Working two periods a week, students share the jobs of cleaning the dormitories, returning books to library stacks, serving as office helpers and laboratory assistants, and performing other essential tasks. In addition, all residents of a given dormitory are responsible for keeping its entries free of litter, snow and ice.

The Clusters take turns each week working in the dining hall, Seniors serving as overseers. Seniors have many other supervisory roles, including Cluster and School offices, editorial boards of student publications, Club leadership, and other assignments serving the Phillips Academy community.



Counseling and Discipline

Those who are not accustomed to a residential school may at first be surprised by the degree of independence an Andover student has; on the other hand, they may be surprised by the existence of rules and procedures necessary to protect the rights of individuals and to enable the school to achieve its ends. Existing rules have a dual purpose: to preserve the necessary order in the community so that effective learning can take place, and to teach students that individual freedom can be achieved only through due consideration for others. The school tries to keep rules to a minimum. Incoming students and their parents are provided with a copy of the *Academy Blue Book*, summarizing rules and regulations; all students are held responsible for its contents.

Each student has a faculty House Counselor living in the dormitory's faculty apartment and available for advice and assistance. This is the faculty member most directly responsible for the students in a dormitory, working with them on both a personal and academic level. Parents can expect to hear from the Counselor at regular intervals and are encouraged to turn to this faculty member for information about a student's progress.



Each Cluster Dean supplements the work of the House Counselor and is available to students and parents for information and advice. Other support staff include academic advisors, who help students in the Cluster plan their academic programs, and the College Counseling Office, which assists all Seniors with their future educational plans.

Graham House serves the community in several ways. The staff offers psychological counseling, study counseling, study skills courses, student tutorial services, the Psychology Department curriculum, consultation to faculty and staff, and specialized workshops in response to residential needs.

Discipline is handled at the Cluster level and involves the Cluster Dean, House Counselor, other faculty and student representatives. Offenses involving a student's integrity, social offenses that threaten the well-being of other individuals or the school community, and continued infractions that indicate an unwillingness to come to terms with the demands of the school — all render a student liable to dismissal. Cluster recommendations for suspension or dismissal are made to the Headmaster, who makes the final decision. Examples are dishonesty, the possession or use of alcoholic beverages or illegal drugs and unauthorized absence from school bounds. Students may not possess, rent or drive any motor vehicle within school bounds; bicycles are permitted. Andover does not allow smoking, unless students have completed a school-administered course on the health hazards involved and have parental permission.

In a community such as Andover, all must commit themselves to the goals of the community and to loyalty to each other. Since education at Phillips Academy is both intellectual and humane, students and faculty derive mutual support from sharing of themselves and their ideals.

Trust and responsibility have many interpretations; these words have become hackneyed from overuse and misunderstanding. But the ideas they embody — sensitivity to others, willingness to explore and respect differing points of view, charity and humility in expressing judgment, readiness to cherish friendship, to depend and to be depended upon — are nonetheless fundamental. Such values can scarcely be legislated and can only be imperfectly defined. Yet the health and happiness of everyone in the community depend on consideration and awareness, restraint and candor, discretion and shared joy. Collaboration toward these imprecise but worthwhile ends is an expectation which all at the Academy hold.

Only boys and girls who feel that they can live happily with the rules and guidelines of Phillips Academy should apply for admission.



In the early 1930's Abbot alumnae parents tried to persuade Principal Bertha Bailey to abandon the required long black stockings worn with the girls' gym bloomers. To this request she steadfastly refused: "I don't like legs."



Harriet Beecher Stowe, author of *Uncle Tom's Cabin*, and her husband, a Seminary professor, lived in Stowe House. She is buried in the school cemetery. Mrs. Stowe shocked the strict Congregationalist community by giving parties and entertainments for students, was suspected of going to the theater and even of having "Episcopalian leanings."

Claude M. Fuess, *An Old New England School*

The Campus Ministry

Reflective of a diverse student body, the religious ministry at Phillips Academy is also diverse. Priest, minister, and rabbi serve the ongoing liturgical and celebrative needs of the Roman Catholic, Protestant, and Jewish students on campus; the chaplains also teach, counsel, and help organize a variety of community service and social action projects for the entire campus. To meet the needs of students from other spiritual traditions, opportunities are provided for reflection, meditation, and fellowship in a variety of settings.

Activities

Extracurricular activities are an important aspect of a student's education, and Andover offers a rich fare, thanks to the diversity of interests in the student body. From the Pre-Med Club member to the Model Railroader, it seems that all Andover students do something special in their free time.

Many of the activities are service-oriented; the Community Service Program places student volunteers in area nursing homes, elementary schools, youth centers and other agencies. Closer to home, the Tour Guide Association handles the responsibility of conducting campus tours for the Admissions Office. Older students who are members of the Tutorial Program offer help to fellow students in academic difficulty. The student radio station, WPAA (91.7 on your FM dial), is on the air from 6:30 a.m. to 11:30 p.m. daily, serving the local listening area as well as the student body. *The Phillipian*, the Academy's prizewinning student-run weekly newspaper, is wholly uncensored; students lay out the paper and do their own typesetting, as well as write the articles and headlines. The *Pot Pourri*, the school yearbook, and the school literary magazine, *The Mirror* (Robert Frost was an early contributor), provide more opportunities for those with a literary bent.

Cultural organizations include the Afro-Latino-American Society, the Asian Cultural Society and others; course-related groups range from the Astronomy Club to the Russian Club. The Chapel Council, the Newman Club and the Jewish Student Union support the ecumenical ministry in providing active religious communities for Andover students.

At any time during the week, actors and directors will be working on a main stage play or on a student production in the Drama Lab; the Andover Student Political Union may be listening to a State Department official discuss the Middle East; the Natural History Club may be birdwatching on an

ocean beach or — if the season is right — the Ski Club may be on its way to the White Mountains of New Hampshire.

Many students make extensive use of school facilities in their free time, whether or not they are affiliated with a club or organization. The Arts Center is a major focus of school life — darkrooms are used almost around the clock, and students and faculty interested in painting, metal sculpture, ceramics or design make use of the center's studios and workshops in their free time. The Music Department also provides facilities for students interested in pursuing music beyond the classroom.

There is no limit to the variety of extracurricular activities at Andover. Students who do not find an existing club or organization that meets their needs are encouraged to start one.

Undergraduate Organizations (Clubs)

Academy Symphony Orchestra
 Afro-Latino-American Society
 Andover Student Political Union
 Astronomy Club
 Athletic Advisory Board
 Backgammon Club
 Band
 Blue Key Society
 Brass Ensemble
 Bureau of Tutoring
 Cantata Singers
Caucus (Af-Lat-Am publication)
 Chamber Music Society
 Chamber Orchestra
 Chapel Council
 Cheerleaders
 Chess Club
 Chorus
 Coin Club
 Day Student Union
 Drama Workshop
 Dungeon and Dragon Society
 Eagle Scout Post 107
 EAT (Environmental Action Team)
Eidolons (student photography publication)

Fidelio (madrigal singing society)
 French Club
 German Club
 Health Food Club
 International Asian Society
 Jazz Band
 Jewish Student Union
 Junior Achievement Club
 Mass. General Hospital Intern Exchange
 Micro Computer Club
The Mirror (literary magazine)
 Model Airplane Club
 Model Railroad Club
 Muse
 Natural History Club
 Nuclear Awareness Education Group
 Newman Club
 Orchestra
 Outing Club
The Phillipian (independent weekly student newspaper)
 Philomathean Society (debating society)
Pot Pourri (yearbook)
 Pre-Law Society
 Pre-Medical Society

Press Club
 Psychology Club
 Radio Broadcast Association (WPAA-FM)
 Russian Club
 Sailing Club
 Ski Club
 Social Functions Committee
 Spanish Club
 Stage Crew
 Stamp Club
 Student Guides
 SUMOP (Summer Job Opportunities)
 Table Tennis Association
 United Nations Club
 War Games Club
 Western Union
 Women Students' Union
 Young Democrats





Educational Resources

The Oliver Wendell Holmes Library

At the center of Andover's intellectual life is the 102,000-volume Oliver Wendell Holmes Library, named after the famous doctor and poet who was a member of the Class of 1825. The stacks are open to students. In addition to academic work, students and teachers use the library to explore new fields of interest and to read casually.

The library subscribes to over 260 American and foreign periodicals and daily papers from cities throughout the country. A microfilm file of *The New York Times* is available. Particular library treasures are the Jansson Atlas, printed in Amsterdam in 1657, papers and books of Oliver Wendell Holmes, and one of the world's leading collections of Vergiliana.

The Addison Gallery

The Addison Gallery of American Art operates both as a museum in the traditional sense and as an art center for the school and the community. In addition to organizing exhibits of American art from the collection, the museum staff originates exhibits of contemporary painting, sculpture, photography, video, film and crafts. Seminars bring artists in close contact with students to discuss contemporary art issues. In cooperation with Phillips Academy's Music Department, concerts by faculty and students are produced in the museum.

The holdings of the museum are recognized as a distinguished specialized collection: Allston, Copley, Morse, Stuart, West and others represent the Colonial period. Of special importance among the many paintings of the nineteenth century are examples by Cole, Doughty, Eakins, Homer, Inness, LeFarge, Ryder, Twachtman and Whistler. The early part of the present century is shown in the work of Bellows, Davies, Demuth, Hassam, Hopper, Luks, Marin, Prendergast and Sloan. Contemporary artists are represented by works of Calder, Lippold, Moholy-Nagy, Hofmann, O'Keeffe, Pollack, Shahn, Wyeth and others.



Respice Artem Patriae

"Respect the art of your country", was the admonition of Thomas Cochran, founder of the Addison Gallery of American Art 51 years ago, before New York was an international art center and when a museum dedicated to American art was still a novelty. Founded in the hope that "if Andover students could be surrounded by beautiful things, their lives would be immeasurably enriched", the gallery and its collections have fulfilled this vision.



The Robert S. Peabody Archaeology Museum

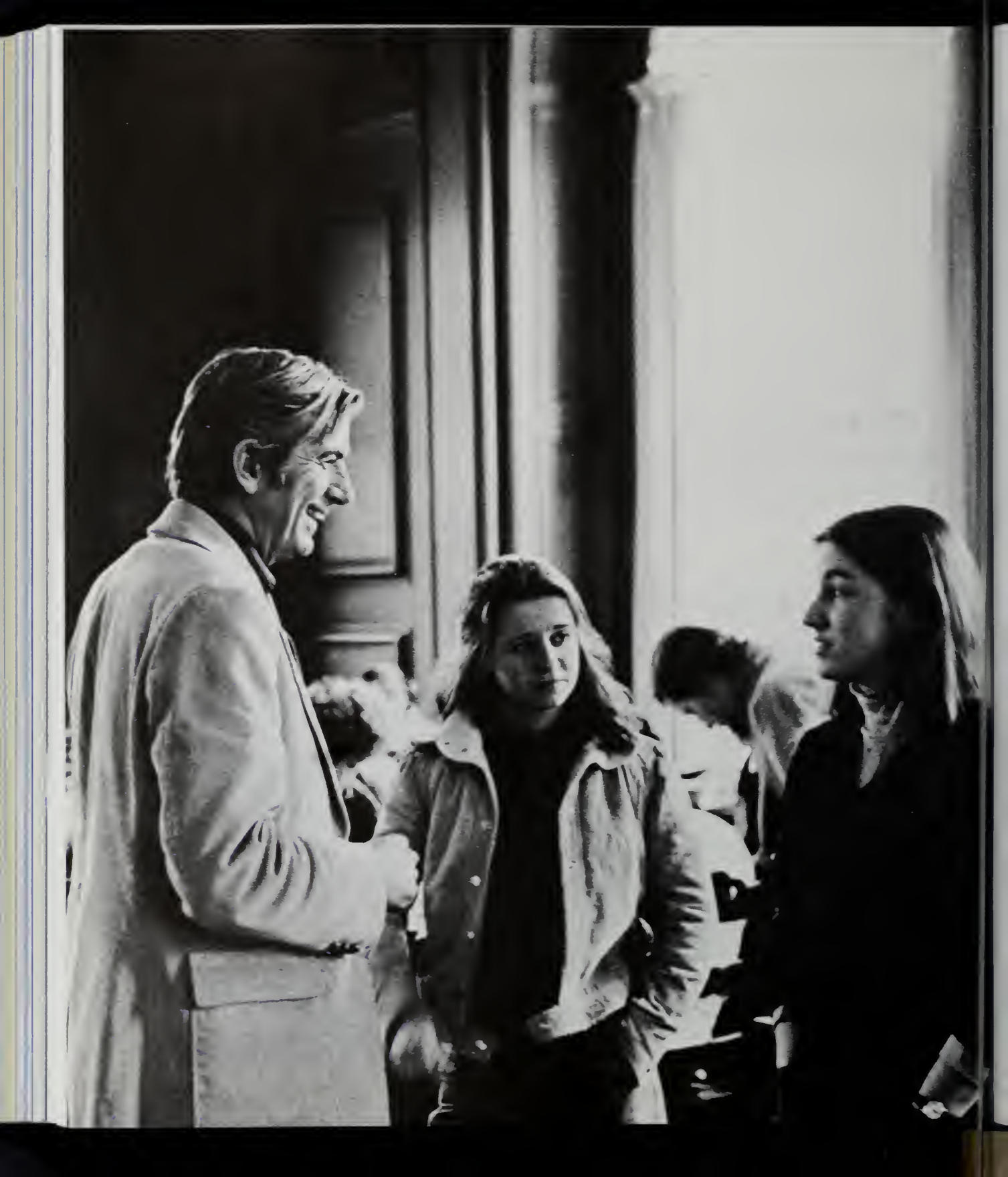
The Robert S. Peabody Foundation for Archaeology has conducted major archaeological research in this hemisphere for the last seventy-five years and has published many reports of its scientific investigations. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas. The laboratories of the museum are used in teaching and illustrating the Foundation's research. Mature students may undertake special study projects which involve the use of the Foundation's collections and library resources.

Current research is concerned with the origins of agriculture and with the concomitant rise of civilization in the New World.

The Cochran Sanctuary

The Moncrieff Cochran Sanctuary is a sixty-five-acre tract of rare beauty located so close to the center of school activity that it is in fact an extension of the campus. Landscaped areas planted with dogwood, azalea, rhododendron and laurel provide a succession of bloom that draws many visitors from late April to mid-June. A brook and two ponds attract nesting ducks and geese, and extensive natural wild areas, varied in terrain and plant life, provide nesting places for many species of land birds. Cross-country runners and skiers make extensive use of the Sanctuary, as does the Academy's Search and Rescue program.





The Academic Departments

The Curriculum

The curriculum of Phillips Academy contains both a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical. All departments offer courses beyond the level of preparation for college.

Classroom groups are small enough to permit individual attention; the average class size is fourteen. Students are placed in sections fitted to their attainment and, through accelerated sequences and advanced courses, are encouraged to progress at a rate commensurate with their ability and ambition. Many students fulfill requirements ahead of the normal year, increasing their choice of college-level courses and other elective opportunities. Andover's trimester system provides flexibility and variety in the curriculum and allows various combinations of independent work and off-campus projects.

Every student is assigned to an academic advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements and the student's particular interests. With the approval of the academic advisors and House Counselors, students may select their instructors and sections. However, the school cannot guarantee that all students will be able to have their desired selections.

The curriculum and diploma requirements are described in detail in the *Course of Study*, which will be sent upon request to each preliminary applicant and to others who would like to receive it.

THE ARTS



During his second and third years at Andover, Jack Lemmon's grades were suffering due to his overpreoccupation with theatrics and composing. Though things looked very bleak in his senior year, he applied himself diligently and made what he thought was an astounding reversal. Against all odds he was able to graduate. When Headmaster Claude Fuess handed the proud young Lemmon his diploma, he said, "A remarkable change. I'm truly impressed, Bill."

Visual Arts

At the heart of the art program is a concern that all students learn to see freshly and accurately, that they learn how to organize their efforts to make something happen, that they develop a critical eye for the coherence of their environment, all these with an independent mind.

The diploma requirement in art is as follows: Juniors and new Lower Middlers must take a trimester course in studio art; an entering Upper Middler must take a trimester course in studio art or music. Andover attempts to balance structured, problem-solving courses like the basic Visual Studies, with more adventurous advanced courses, organized around longer-term projects. For a student who desires several terms in art or design, the courses are here, whether the student's objective is a professional school, Advanced Placement in a liberal arts college, or simply a strong basis in a traditional area of general education.

The superb facilities of the Arts and Communications Center — fully equipped wood and metal shops, two complete photo labs, print-making equipment, painting and drawing studios, a kinetics studio — are supplemented by the several kilns available to ceramicists. The department welcomes extracurricular use as well as work related to courses, and faculty members are on hand every evening to encourage the idea that whether it's painting or bicycle repair, the Arts Center is the place to go.

Theatre and Dance

Courses in theatre are designed for students who seek formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work on plays. A variety of experience is available; some courses are performance oriented; some are theory oriented; some are both. All combine classroom and workshop sessions; students work out practical theatrical problems together under the guidance of an instructor. Drama, as well as dance, both modern and ballet, may be elected as an alternative to athletics, once a year.

George Washington Hall, capable of handling audiences of one thousand, includes a flexible,



professionally equipped proscenium stage. It has a full fly system, accommodation for numerous lighting instruments and an elevator/pit. Recent main stage productions have included *The Me Nobody Knows*, *Cabaret*, *The Time of Your Life*, *Twelfth Night*, *Macbeth*, *Our Town*, and *Camelot*.

The Drama Lab, also in George Washington Hall, is a "black box" — an intricate arena/workshop with excellent lighting facilities, suitable for audiences of not more than seventy-five. Although main stage plays are usually directed by a member of the faculty, the Drama Lab allows students to direct plays themselves and to experiment with dramatic styles. A sample of productions from recent years includes plays by Albee, Ionesco, and Pinter but original student work is also performed here.

Theatre students are encouraged — but not required — to supplement their classwork by participating in any of the numerous productions mounted each year; anyone may audition for the Andover Touring Company, touring with such plays as *Our Town*, *The Fantasticks*, *Scenes from American Life* and *Godspell* during spring vacation.

Music

The Music Department faculty consists of five full-time and several part-time instructors. Other highly qualified instrumentalists are available to teach voice, piano, organ, classical guitar, brass, percussion, strings, and woodwinds.

Andover offers courses for the beginner as well as for intermediate and advanced students both at the applied level (study of musical instruments or playing in a musical organization) and in the history, appreciation, and theory of music. An entering student who has not had the opportunity to learn to play may join a class to study an orchestral instrument. He or she may also, for a nominal fee, study privately.

The Nature of Music, or Music 20, is the diploma requirement in music, and a prerequisite for most courses in the history, appreciation, and theory sections. A more advanced three-part course, Theory of Music, runs in sequence throughout the year.

Graves Hall, the department's newly renovated home, has large rehearsal halls for the Concert

Graves Hall, the department's newly renovated home, has large rehearsal halls for the Concert Band and the Academy Orchestra, many individual practice and ensemble rooms, music classrooms, teaching studios and an electronic music studio. The department also has a large, up-to-date record library and listening room. The Chorus has a fully equipped rehearsal room and a library of music literature in the Cochran Chapel, a short distance away. The Chapel also houses two new Andover organs for the use of beginning and advanced organ students. One is located in Kemper Chapel; the other, in the main chapel, is a 30-stop, double manual, tracker action instrument.



VISUAL ARTS

Introductory Studio Courses

Visual Studies

Visual Studies for Juniors

Introductory Design

Introductory Ceramics

Introductory Photography

Intermediate Studio Courses

Visual Studies (Art 10) is a pre-requisite for all intermediate courses.

Drawing

Animation

Drawing and Two-Dimensional Design

Two-Dimensional Design

Three-Dimensional Design

Intermediate Photography

Advanced Studio Courses

Visual Studies (Art 10) is a pre-requisite for all advanced courses.

Graphics and Photography

Studio Photography

Painting

Filmmaking

Advanced Ceramics

Printmaking

Advanced Photography

Sculpture

Photo Illustration

Large Format Photography

Photo Journalism

Kinetics

Architecture

Contemporary Communications

Calligraphy: The Art of Lettering by Hand

Advanced Placement in Studio Art

History of Art: Painting and Sculpture

History of Art: Architecture

MUSIC

Applied

Beginning Instruments

Recorder Ensemble

Brass Ensemble

Woodwind Ensemble

String Ensemble

Fidelio Society

Band

Chorus

Chamber Orchestra

Private Instrumental and Vocal Lessons

The Nature of Music

Developing Musical Skills

History and Appreciation

Independent Study in the History and Literature of Music

Jazz

Popular Music in America

Theory

Orchestration and Conducting

Theory of Music I

Theory of Music II

Theory of Music III

Electronic Music

Advanced Techniques in Electronic Music

THEATRE AND DANCE

Theatre

Introduction to Acting

Public Speaking

Acting and Directing Workshop

Stagecraft

Play Production

Shakespearean Workshop

Playwriting

Dance

Introduction to Dance

CLASSICS

Latin and Greek — still? Yes, as futuristic nightmares and present turmoils are reawakening a search for order, perspective and ideals in the human experience, names like Plato, Vergil, the Parthenon and the *pax Romana* not only symbolize great milestones in that search but also suggest the habits of mind that produce enduring greatness — the same habits of mind that show up so clearly in a sentence, paragraph or entire work of Latin or Greek literature.

The chief aim of the Classics Department is to help students rediscover this sense of order and ideals, in the hope that they may apply it, in turn, to the challenges they face today. Many recognize this by choosing Latin or Greek as the foreign language in which to fulfill the diploma requirement. Others elect one or both as second or even third languages. Still others opt for elective survey courses in various aspects of Classical civilization, as listed below, or, by special arrangement, for independent projects in reading or research.

CLASSICS

Greek

First Year: basics of language and culture

Accelerated First Year: two years in one
Introduction to Greek Language and Culture
(one term)

Second Year: Xenophon, Plato, New Testament

Third Year: Homer, Euripides

Fourth Year: Sophocles, lyric poets, Thucydides

Latin

First Year: basics of language and culture

Accelerated First Year: two years in one
Introduction to Latin Language and Culture
(one term)

Second Year: Caesar, Livy, Plautus

Third Year: Cicero, Sallust, Vergil

Fourth Year: Vergil's *Aeneid*

Fifth Year: Horace, Catullus, Livy, Tacitus

Greek Civilization

Roman Civilization

Etymology

Ancient History

Classical Mythology

Survey of Greek Literature

Survey of Roman Literature

ENGLISH

Convinced that level of achievement is more important than the number of years a subject is studied, the English Department has established modest but firm diploma requirements. A student must prove himself competent in writing and reading through the English Competence course and, by taking the Literature Sequence, acquire a sense of the depth and breadth of his literary heritage. For students who enter in the 9th grade, English 10: The Journey, which is a preparation for the Literature Sequence, is also required.

Once the student has successfully completed that Literature Sequence, which normally takes a year and offers several options, opportunities multiply. Students may enroll in any of the Literature Sequence courses that they have not yet taken; they may study any of the more than twenty advanced or specialized courses offered by the department; Seniors may qualify for an independent project supervised by the teacher of their choice.



The walls that used to separate academic departments are crumbling. A number of the courses in Theatre are taught by members of the English Department. Most of the interdisciplinary courses are related to English studies. A course in English etymology is taught by the Classics Department. Several of the foreign language departments offer courses about their literature in English translation, but the fundamental requirement does not change. Every student who graduates from Andover has either passed the Competence course in the basic skills of writing and reading or English 300.

ENGLISH

Introductory Courses

English 300 (for Seniors and Postgraduates)

Required Sequence Courses

English Competence (three terms)

Lit B, The Comic View, The Tragic View, The Mythic View (two terms)

Lit C, Shakespeare (one term)

Elective Courses

(Only courses with sufficient enrollment will be given.)

Irish Studies

American Writers

Introduction to Writing

Hemingway and Fitzgerald

Afro-American Literature

James Joyce

Man and God

Forms of Literary Imagination

Modern Playwrights

Shakespeare: The Man, The

Times, The Theatre, The Plays

Satire and Comedy

Novel and Drama Seminar

Creative Writing

The American Novel

Milton and Spenser

Chaucer and His Age

Wit and Poetry in the Seventeenth Century

Images of Women



Graceful Bulfinch Hall (1819) has been in Academy use for more than 150 years as a recitation hall, gymnasium, and dining hall and now houses Andover's English classes. Dr. Oliver Wendell Holmes, Class of 1825, immortalized "the classic hall" in his poem, "The School-boy," written over 100 years ago for the Academy's Centennial Celebration.

HISTORY AND THE SOCIAL SCIENCES

The courses in History and the Social Sciences cover a broad spectrum of human experience: from the Vietnam War to ancient Athens, from the modern American Presidency to primitive cultures, from Medieval History to Nuclear Weapons. They range in teaching techniques from drill in close reading, note-taking and testing to individual projects, written or oral, conceived by students. All are based on the conviction that a citizenry that is informed about man's experience, both past and present, is essential to a democratic society.

No course in the department relies on a single textbook. Students work with paperbacks, books on reserve in the library, mimeographed handouts, movies, and slides. All courses emphasize, not only the subject matter studied, but also the acquisition of basic historical skills that should serve the student well throughout the remainder of his life.

The courses for Juniors focus on the concept of Continuity and Change, have a global focus, use a multi-disciplinary approach, and include one day a week on contemporary affairs. In the Lower Middle year there are courses in American, European, and Asian biographies. These courses emphasize study skills basic to the study of history. The department believes that the study of great men and women holds a special interest for this age group and reinforces the significance of the individual's role in history. These courses prepare students for the required course in United States History in the Upper Middle or Senior year and for other upper-level history courses.

The diploma requirement for History and the Social Sciences is successful completion of United States History plus one trimester elective in an upper level non-United States History, or in history prior to the settlement of the Americas, or in a social science course. There are also advanced seminars in various subjects in American Civilization for Seniors who have completed the diploma requirements. In United States History and in several upper level electives, the department requires students to choose topics for extensive

papers; and encourages them to use the raw materials of history — newspapers, letters, diaries, interviews. Qualified Uppers and Seniors may spend the spring term in Washington, working as interns in Congressional offices.

HISTORY AND THE SOCIAL SCIENCES

Social Science

Introduction to Economics
The Modern American Presidency
American Race Relations
Urban Studies Institute
International Relations: The Present
Patterns
Men, Women and American Culture
Nuclear Weapons - Proliferation and
Responses

History

Continuity and Change: An Introduction
Continuity and Change: The Pre-Modern
World
Continuity and Change: The Modern World
American Biography
European Biography
The United States
American History for Foreign Students
Ancient History
Social History of the Middle Ages
Modern Europe: A Survey
The Soviet Union
Modern Russia: History and Literature
Tudor England
Victorian England
International Relations: The Present
Patterns
Modern Japan
Modern China
The Middle East
Africa and the World
Latin American Studies
Families in America
The 20th Century Constitution, the
Courts, and Individual Rights
American Urban History
History and Mathematics
Topics in the History of Phillips
Academy and Abbot Academy



MATHEMATICS

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late twentieth century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his or her energies and curiosity to the organization of mathematical knowledge.

The mathematics curriculum is built around a core sequence of eight trimester courses, three of elementary algebra, two of geometry, one of intermediate algebra, and three of precalculus topics, completion of which will satisfy the diploma requirements. An additional trimester is usually required before entering calculus. Students whose previous course was elementary algebra will take *Geometry* unless our placement test indicates a need for one term of *Algebra Review* first. Those who enter with one year of algebra and one year of geometry will satisfy our diploma requirements by taking intermediate algebra and the first two precalculus trimesters unless the placement test shows a need for *Algebra Consolidation* first. The

latter course prepares the students to take the precalculus courses the following year. There are a variety of special courses designed for new students who fall between the above criteria.

The department also offers many elective, term-contained and year-long courses, descriptions of which may be found in the *Course of Study*. Over one-third of all mathematics is taken electively, much of it in preparation for the Advanced Placement Examination. These courses include the study of limits and sequences, elementary and advanced calculus, analytic geometry, differential equations, probability statistics, computer science, linear algebra and vector analysis.

The Mathematics Department is located in Morse Hall, which also houses three computer rooms. One room has 11 timesharing terminals connected to the DEC mini-computer system. The other two rooms have microcomputers; one with 9 IBM Personal Computers and the other with 7 Apple computers and 1 Radio Shack computer. A variety of computer courses are offered that range from an introduction to computers to preparation for the Advanced Placement test in Computer Science. Computer languages taught include APL, LOGO, BASIC and Pascal.



The community of students who like math at Andover is sizeable. They share their curiosity and knowledge by offering to tutor other students at the school, and by participating in interscholastic competition under the aegis of the Math and Computer Clubs.

MATHEMATICS

*Courses leading to satisfaction
of the diploma requirement*

Elementary Algebra
Algebra Review
Geometry
Algebra Consolidation
Intermediate Algebra
Precalculus
Elementary Functions
Elective Courses
Calculus
Computer Programming: beginning,
intermediate and advanced
Infinite Series and Differential
Equations
Linear Algebra and Vector
Calculus
Mechanical Drawing
Navigation
Probability
Statistics

MODERN FOREIGN LANGUAGES

As long ago as 200 B.C. the Latin poet Ennius used to say that because he knew three languages he had three hearts. Andover can render no finer service to today's world than to send forth its alumni with many hearts, ready and able to feel for, to understand, and to respond to the millions of people who speak languages other than English.

Acknowledging the importance of foreign languages, Andover requires for the diploma three years of an ancient or modern language. (For Greek and Latin, see Classics.) The modern foreign languages offered are Chinese, French, German, Italian, Russian and Spanish. Emphasis is on the spoken word, and the foreign language is the basis for all communication in the classroom. Small classes make possible maximum participation, with supplementary practice provided by our versatile language laboratory. There are opportunities to join accelerated classes which complete, for example, the work of four years in three.

At the 4th-, 5th- and 6th-year levels the study of literature may be supplemented by courses in the

art, history, geography and music of the foreign country. In upper-level courses students can prepare for Advanced Placement Examinations in language and literature and qualify for advanced courses when they enroll in a college. Superior students may carry out independent projects, including apprentice teaching, under careful guidance.

At all levels of study progress in the foreign language is facilitated, and the resources of the classroom are expanded, through occasional use of communication media (periodicals, radio, etc.) and such activities as the staging of plays, the use of the school's radio station for broadcasts in foreign languages, festivals, language tables in the dining room, movies, clubs, visits by performing groups, and trips to language events in Boston and at nearby schools and universities. Students are urged to consider opportunities, sponsored by Andover or by other schools, to live and study abroad.

For Andover's School Year Abroad program, see page 44.

Chinese

In response to the importance of China and its language, and the need for some school to provide leadership in instruction at the secondary-school level, Andover is developing an intensive course in Chinese language (Mandarin) as an elective course.

French

Before the outbreak of the French Revolution, French was considered the universal language of the West. It was the language of diplomacy, was already flourishing as a literary medium and, because of its clarity and precision, reflected both French culture and philosophy, influencing the development of democratic institutions in the United States as well as in other countries. The study of French rewards the student with the ability to communicate with French-speaking peoples and to appreciate the importance of order in expression, broadening his views through a growing familiarity with the rich and lively literature and civilization that the language represents.

German

German is central Europe's principal language, and knowledge of it opens up an understanding of European culture and affairs. Students may learn German to read the works of Goethe, Schiller, Lessing, Kafka, Hesse, Brecht and Grass in their original form, or to follow the arguments of Hegel and Nietzsche, or perhaps to understand more intimately the background of modern socialism and democracy in the world. Many of the most important developments in modern physics, electronics, chemistry and engineering were originally published in German, and American businesses are realizing increasingly the importance of personnel able to speak German.



Italian

The growing popularity of Italian in American schools and colleges reflects a growing awareness of the charm of the Italian language and of the rich cultural heritage which it serves. Andover's intensive course for Seniors attracts students with rich experiences in other languages, is conducted in Italian, and has the scope and pace of a course for college freshmen.

Russian

Approximately forty percent of Russian secondary school students are learning English. A fraction of one percent of American secondary school students study Russian. For cooperation, understanding, and influence, our doctors, diplomats, scientists, and businessmen should be able to communicate with Soviet counterparts in Russian.

Since secondary school is the best place to begin,

Andover has established a rich program for our beginning as well as our advanced students.

Spanish

The Spanish Department is anxious to help students discover the varied cultural heritage of the Spanish-speaking world through intensive study of the language, both spoken and written.

It seems particularly important to learn a language spoken everyday by millions of Americans across the U.S. In addition, Hispanic literature, from Cervantes to Borges, has played a vital role in world literature, as attested by the frequency with which Hispanic writers have been awarded the Nobel Prize for Literature.

Students who enter the professions will find Spanish an indispensable tool. But whatever they do, Spanish will be the key to a richer, more rewarding life.

MODERN FOREIGN LANGUAGES

Chinese and Italian offer an intensive introductory course for seniors. All other languages offer introductory and intermediate courses, with opportunities for acceleration at those levels. Students are then eligible for the following courses:

French

Language and Review and Contemporary French Life
Selected Readings
Village Français
French Civilization
Conversation and Phonetics
Written Expression
Literature and Film: French Theatre
French Literature
French History
French Civilization Outside of Europe
Québec et les Québécois
Stylistics
Advanced Placement
Contemporary Literature
German
Literature, Composition and Conversation
Language and Literature for Advanced Placement
Special Topics

Russian

Literature, Composition and Conversation
Advanced Literature, Composition and Conversation
Russian Press
Literature
Special Topics
Russian History and Literature

Spanish

Second and Third Year, Advanced, with winter term in Mexico
Spanish Language Review
Aspectos de la Cultura y Civilización del Mundo Hispánico
Introduction to Literature, with Grammar Review
Literature and Culture, with Grammar Review
Literature for Advanced Placement
Advanced Studies in Literature
Special Topics: Literature, Sociology, Culture
Latin American Studies

PHILOSOPHY AND RELIGIOUS STUDIES

The department seeks to initiate students into three distinctive human quests: the search for meaning, the search for justice and the search for the foundations of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered on a variety of topics, at a variety of levels, and involve four prepared class periods.

PHILOSOPHY AND RELIGIOUS STUDIES

Introduction to Religion
Non-Western Religions
Biblical World-view
Portraits of Jesus
Man's Search for Meaning
Introduction to Ethics
Bioethics
Law and Morality
Non-Violence
Responses to the Holocaust
In Search of Justice
Proof and Persuasion
Great Philosophers

SCIENCE

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers Andover students an introductory term-contained course in archaeology. The course deals with the prehistoric development of civilization and with archaeological theory and method. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas.

Biology

Andover provides ample opportunity to develop interest in the biological sciences. In addition to two year-long courses in introductory biology the department offers four courses on the advanced placement level and three elementary courses which are particularly well suited to serve younger students. The introductory courses give students a general background and an understanding of some of the current trends in biology. Field trips, laboratory work, independent projects, lectures, slides, films, and video tapes are all part of the courses. Most of the laboratory work performed during the Spring term is devoted to independent projects.

The term-contained advanced courses prepare students for the Advanced Placement Examination. These courses review some of the material presented in the introductory courses as well as introduce new concepts and techniques. The advanced laboratory work gives students experience with the techniques of chromatography, electrophoreses, spectrophotometry, centrifugation, statistical analysis and dissection. Computer simulations are also used on the Science Division's Apple II microcomputers.

Bird watching trips are sponsored occasionally throughout the year by the Natural History Club for interested students who may or may not be enrolled in a biology course. A small zoo, consisting of rats, mice, gerbils, and various reptiles is maintained in Evans Hall. Its population varies with student interest, the reproductive rate of the animals and the dietary needs of the resident boa.



In the basement of Evans Hall there is a superb bird collection on loan from Harvard University and an extensive shell collection is exhibited in various parts of the building.

The Evans Hall greenhouse is a refreshing place to visit during the long winter months. Students grow plants there or start potted plants for their own rooms. An environmental growth chamber is available for those interested in experimenting with photoperiodism.

Chemistry

The Chemistry Department offers full-year introductory courses at various levels which prepare students for more advanced work in chemistry.

Many students have undertaken laboratory projects. For example, one recent experiment involved the synthesis of sulfanilamide followed by an investigation of the effectiveness of the product as an antibiotic. Another examined the colors of optically active coordination compounds of cobalt. One student spent a term synthesizing organic compounds and examining their infrared spectra. Others have studied organic qualitative

analysis as an introduction to the chemistry of organic functional groups.

Students usually suggest their own experiments, but they can also adopt and change existing projects in a creative way. A student might design computer programs for chemistry problems, study the use of microchemistry to diminish school laboratory pollution, or explore molecular structures with infrared spectroscopy.

The department has the equipment for the usual experiments in elementary synthesis and analysis, including four Mettler electronic, analytical balances. There are instruments which enlarge the scope of feasible projects — a pH meter, several vacuum tube voltmeters, a Kontes Universal Electrode Kit, a Kern polarimeter, a Bausch and Lomb Spectronic 20 colorimeter and a Perkin-Elmer 700 infrared spectrophotometer. Six microcomputers are conveniently located in the Roscoe E.E. Dake Computer Room in Evans Hall.

Physics and Astrophysics

The Physics Department offers five introductory courses at various levels of difficulty in order to meet the needs of Andover students. Some representative topics are mechanics, waves, electromagnetism, light, and "modern physics." Laboratory work, classroom demonstrations and extensive problem solving enable students to develop both a qualitative and quantitative understanding of the concepts of physics. Also offered are courses including geology, electronics, astronomy, relativity and early quantum theory, and university-level Advanced Placement physics.

The Physics Department operates the Thornton Observatory which houses a research-grade 16-inch reflector, a 6-inch Brashear refractor and six other portable telescopes. These instruments are used in astronomy courses as well as in project work; recent projects have included such areas as solar, lunar and planetary study; astrophotography; computer simulations; and orbit analysis.

Past student projects have included laser transmission of information, holograms, the construction of an electronic calculator, speed of light measurements, determinations of the electronic charge and mass, interferometer measurements,

and finding the gravitational constant. Formal and informal contact with the faculty encourages students to examine the interaction of physics and the environment, including man, thus hopefully promoting better understanding of the processes of scientific investigation.

Psychology

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strategies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained.



Dr. Charles Abbot, Class of 1891, a solar energy pioneer and head of the Smithsonian Institution for many years, predicted in the early 1940's that solar energy would become the primary source of power when oil and coal were depleted. In 1972 he received his last patent, for a device to convert solar energy into electricity, shortly before his 100th birthday.

ARCHAEOLOGY

Archaeology

SCIENCE

Introductory Physical Science

Introduction to Biological Science

Astronomy – the Solar System

Oceanography

Ecology

Introduction to Zoology

Junior Science Honors

Animal Behavior

Observational Astronomy

Astronomy – The Universe

Beyond the Solar System

Geology

Biology

Introductory Biology

Anatomy and Physiology

Chemistry

Elementary Introductory Chemistry

Introductory Chemistry

Research in Chemistry

Elementary Organic Chemistry

Advanced Placement Chemistry

Honors Introductory Chemistry
– Advanced Placement

Physics

Introductory Physics

College Physics

Advanced Physics

Electronics

Relativity and Quantum
Mechanics

PSYCHOLOGY

Introductory Psychology

Human Relations

Human Sexuality

Group Therapy and Process

OTHER COURSES

INTERDISCIPLINARY

Study Skills

Efficient Reading

Language Skills

Mythology

Food and Hunger in

Developing Nations

Contemporary Communications

Russian Literature in English

Soviet Literature in English

Greek Literature in Translation

Roman Literature in Translation

Typing (non-credit)

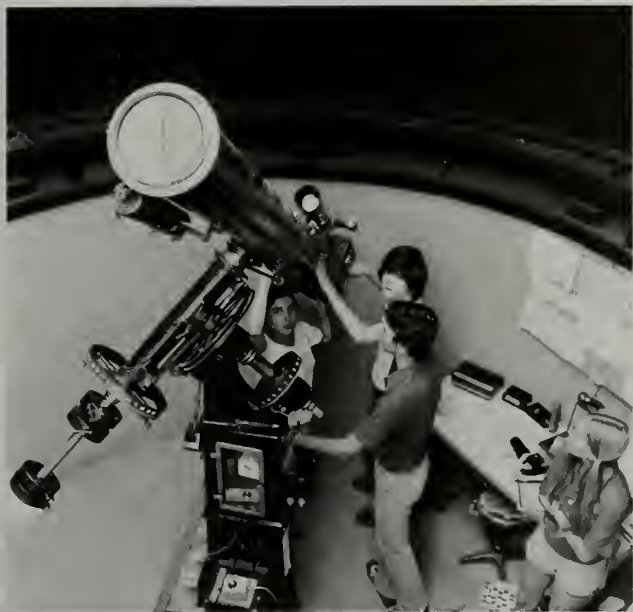
Etymology

PHYSICAL EDUCATION

All Juniors and new Lower

Middlers are required to elect one trimester of P.E. 10 in addition to their regular athletic commitment.

Physical Education





Complementary Programs

Andover's complementary programs combine a number of innovative ideas designed to promote better coordination between public and private education nationally. The concept behind these programs is that of multiple schools. While one school may be accepted as the "home-base" diploma-granting institution, several other institutions may be utilized as complements to this school. Thus far, the multiple schools idea has taken form in several program models which are open to Phillips Academy students as well as students from other schools.

The Andover Summer Session

The Andover Summer Session is a short intensive academic program in which both innovative and traditional courses are taught in only six weeks. Courses in all subjects and at all levels demand hard work — harder work than most students have ever before experienced. Besides English, modern languages, mathematics, history, and the sciences, the curriculum offers such opportunities as Play Production Workshop, Social Psychology, Great Philosophers, Law and Morality, and Film Workshop, Modern Astronomy, Archaeology and Anthropology, Oceanography and Marine Biology, and Modern Economics.

Other features of the Summer Session are special courses in writing, including the nationally known "Competence in Reading and Writing" (developed at Andover); an expanded ESL Program (English as a Second Language) for foreign students who wish to achieve English fluency; and a Chamber Music Program which provides a unique opportunity for able music students in all combinations of piano, strings, winds, and voice, including individual instruction, small ensemble work, or-

chestra, and chorus; and an intensive Studio Art program for serious students of the visual arts who wish to develop a portfolio in preparation for the Advanced Placement Examination in Studio Art.

The Summer Session makes use of all the school's facilities and is open to able boys and girls from all parts of the country and abroad. Applicants must be graduates of the 9th, 10th, 11th or 12th grades. A catalog can be obtained by writing:

Phyllis Powell, Director
The Andover Summer Session
Phillips Academy
Andover, MA 01810
Tel. 617/475-3400, ext. 170

(MS)²: Math and Science for Minority Students

The (MS)² Program — Math and Science for Minority Students — offers Black, Hispanic, and American Indian students three consecutive tuition-free summers of intensive study of mathematics and science. Ninth grade boys and girls are selected on the basis of their superior ability and strong interest in mathematics and science and financial need. The goal of the (MS)² Program is to prepare minority students to compete successfully for admission to selective colleges and for careers in science, engineering and medicine. Further information can be obtained by writing:

Victor C. Young, *Director*
(MS)² Program
Phillips Academy
Andover, MA 01810



The Short Term Institutes

Andover has held a series of Short Term Institutes which are intensive, multi-week courses of study in a single subject, designed to offer high school students a unique residential learning experience. First taught in the fall of 1974, the Institutes offer a program in Art during winter term and special summer Institutes within the context of Summer Session. These Institutes are designed to provide intensive study in a particular field at Andover and to complement a student's home school program, not to compete with it.

School Year Abroad

School Year Abroad offers to qualified Upper Middlers and Seniors a full academic year of living and studying in France or Spain. Originated by Andover, SYA is now jointly sponsored by Andover, Exeter and St. Paul's School. The program gives American students the advantages of living in a foreign culture without sacrificing progress at their home schools or strong preparation for college. Students live with host families, participate in the activities of local athletic and social clubs, and pursue a course of study (both in English and Spanish or French) under the supervision of sponsoring school teachers. SYA offers 19 days of group travel, all college boards, and provides full academic credit, permitting students to graduate from Phillips Academy with their own class. School Year Abroad is financially independent of its sponsoring schools. Financial aid is available. A catalog can be obtained by writing:

Harrison F. McCann, *Director*
School Year Abroad
Phillips Academy
Andover, MA 01810

Other Off-Campus Programs

Andover offers several complementary residential programs. The Washington Intern Program, sponsored by Andover and Phillips Exeter Academy, allows a group of Upper Middlers and Seniors to spend the spring term in Washington working in the offices of U.S. Senators and Congressmen. Phillips Academy tuition, fees and financial aid do not cover the cost of this program.



The Mountain School Program of Milton Academy is a semester-long program for eleventh graders which offers students the opportunity to enjoy a different living and learning experience on a 300-acre farm in Vermont. Phillips Academy students may participate fall term only. Students will continue their academic courses in addition to activities which will emphasize practical skills and crafts. Students will work on the Mountain School farm which supplies most of the food and heat for the school.

In addition to school-sponsored programs, Seniors may arrange off-campus projects related to their special interests. Some have worked as interns with officials in local government and members of the Massachusetts legislature, while others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative and careful planning of a course of study that will meet diploma requirements and free a block of time during the term.



Athletics



Archie Bush, Class of 1866, returned from the Civil War to complete his studies and organized a baseball team for Andover's first interscholastic sports competition. When Archie and his friends cut a geometry class to attend a baseball game, Principal Samuel Harvey Taylor, who brooked no nonsense, kicked them out of school. The Trustees rescinded this action years later and granted them all diplomas. Too late for Archie, who had died on his honeymoon trip to Europe.

In sports, as in studies, students are expected to meet basic requirements and are given wide choice in broadening and deepening their skills, interests and dedication in athletics.

Upon arrival, all new students are given a swim test, and those who do not meet the requirement must take swim instruction as their fall afternoon sport. Juniors and new Lowers take the Physical Education Course five hours a week for one term in addition to afternoon athletics. While taking this course, students are tested for physical aptitude and counseled concerning any areas of deficiency.

The required afternoon athletic program includes a wide variety of offerings in varsity and junior varsity competitive interscholastic sports, in intramural cluster-organized athletics and in instructional, recreational and fitness activities. New students are strongly encouraged to participate for at least one term at Andover in a team sport or a dance performance program. Wherever numbers permit, separate interscholastic competitive team programs are created for Junior boys.

Upperclassmen have the opportunity to substitute an activity or project for one term of athletics a year. Each spring the department attempts to offer an evening Senior Life Saving course and a Water Safety Instructors' course, in addition to required athletics, for those swimmers who wish official accreditation.

The school maintains several athletic facilities which include 12 playing fields and 25 tennis courts; the Borden, Memorial and Abbot Gymnasium Complex with swimming and diving pools, basketball and squash courts, weight training room and other conventional gym spaces; the

newly renovated Case Memorial Cage with its indoor track; the Sumner Smith Hockey Rink; the crew boathouse on the Merrimack River; the ski trails and jump at Holt Hill; and finally the Search and Rescue Room in Evans Hall which provides the base of operations for Andover's popular outdoor program.

Phillips Academy is committed to a required athletic program that provides a variety of sports and activities to its students. The Academy discourages overspecialization in sports at this age level; the athletic program is a complement to, not a substitute for, the academic curriculum. The Athletic Department oversees the program and its facilities with the support and advice of the Faculty Athletic Committee and the Student Athletic Advisory Board.

Health Care

The Isham Infirmary of Phillips Academy is fully licensed as a hospital by the Commonwealth of Massachusetts. There is a full-time Physician Medical Director. The Infirmary has an x-ray department with a full-time technician. Basic laboratory services are also available at the Infirmary. Qualified physiotherapists are available either in the Infirmary or Trainers' Room. Graduate nurses are on duty twenty-four hours daily, and additional graduate nurses manage the Outpatient Services from 7:30 a.m. to 8:00 p.m. Isham Infirmary is staffed and equipped to care for most problems, and nearby general hospitals are available for major surgery or serious emergencies.

FALL TERM

Boys

Ballet
*Ceramics
*Community Service
Crew
Cross-Country
Cycling
Football
Jogging Fitness
Karate
Modern Dance
*Music
Paddle Tennis
*Photo Filed Trips
Search & Rescue
Soccer
Squash
Swim Fitness
Tennis
Yoga

Girls

Ballet
*Ceramics
*Community Service
Crew
Cross Country
Cycling

Field Hockey
Jogging Fitness
Karate
Modern Dance
*Music
Paddle Tennis
*Photo Field Trips
Search & Rescue
Soccer
Squash
Swim Fitness
Tennis
Volleyball
Yoga

WINTER TERM

Boys

Ballet
Basketball
*Ceramics
*Community Service
*Drama
Fitness
Gymnastics
Hockey
Jogging Fitness
Modern Dance
*Music
Paddle Tennis
Search & Rescue

Skiing:

Competitive (Alpine and Nordic)
Recreational (Cross Country)

Squash
*Stage Crew
Swimming
Track
Wrestling
Yoga

Girls

Ballet
Basketball
*Ceramics
*Community Service
*Drama
Fitness
Gymnastics
Hockey
Jogging Fitness
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Skiing:
Competitive (Alpine and Nordic)
Recreational (Cross Country)

Squash

*Stage Crew
Swimming
Track (non-competitive)
Yoga

SPRING TERM

Boys

Ballet
Baseball
*Ceramics
*Community Service
Crew
Cycling
Golf
Jogging Fitness
Karate
Lacrosse
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Softball
Squash
*Stage Crew
Team Cycling
Tennis
Track
Yoga

Girls

Ballet
*Ceramics
*Community Service
Crew
Cycling
Fitness
Golf
Karate
Lacrosse
Modern Dance
*Music
Paddle Tennis
Search & Rescue
Softball
Squash
*Stage Crew
Team Cycling
Tennis
Track
Yoga

*Activities in place of sports are available one term a year to upperclassmen



In the 1840's the widow of Principal Osgood Johnson devoted herself to the care of sick Seminary students at Samaritan House, built and named for that purpose, now a student dormitory. In spite of this, rows of gravestones mark the toll of epidemics. An Academy graduate of 1890 reports that no such care as Widow Johnson's was available to the Academy students of the 1890's: "There was no infirmary. If you were ill, it was nobody's business but your roommate's, who brought you meals from Marland's unappetizing fare."

CALENDAR 1985-1986

Fall Term

Sept. 5, Thurs.	Faculty return
Sept. 9, Mon.	New students arrive and register
Sept. 11, Wed.	Old students return and register
Sept. 13, Fri.	Classes begin
Oct. 18, Fri.	Mid-term academic review
Nov. 1 - 3 Fri. - Sun.	Parents' Weekend (all parents)
Nov. 4, Mon.	No classes
Nov. 26, Tues.	Thanksgiving vacation begins, 1:00 p.m.
Dec. 2, Mon.	Thanksgiving vacation ends, 8 p.m.
Dec. 6, Fri.	Classes end, 1:00 p.m.
Dec. 13, Fri.	Christmas vacation begins, 12 noon

Winter Term

Jan. 6, Mon.	Christmas vacation ends, 8 p.m.
Feb. 7, Fri.	Mid-term academic review
Feb. 10, Mon.	Mid-winter holiday (no classes)
March 10, Mon.	Classes end, 1:00 p.m.
March 15, Sat.	Spring vacation begins, 12 noon

Spring Term

April 1, Tues.	Spring vacation ends, 8 p.m.
April 21, Mon.	College Visiting Day (no classes)
May 2, Fri.	Mid-term academic review
June 2, Mon.	Classes end, 1:00 p.m.
June 6, Fri.	Spring trimester examinations end, 6 p.m.
June 8, Sun.	Commencement
June 12, Thurs.	Spring trimester academic review meeting, 9 a.m.
June 13 - 15 Fri. - Sun.	Alumni Reunions
July 3, Thurs.	Summer Session begins
Aug. 14, Thurs.	Summer Session ends

Admissions

APPLICATION PROCEDURE

Priority will be given to those candidates who complete the application procedure, including the interview, by February 1. A decision from the Admissions Committee will be mailed on March 10. The possibility of admission is considerably lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. A deposit of \$300 is required to reserve a place at the time admission is offered to an applicant.



Office of Admissions and Financial Aid: front row l. to r., Jeannie Ford Dissette, Dean of Admissions; James F. Ventre, Admissions Officer; second row, Meredith Price, Associate Dean of Admissions; Grace H. Taylor, Administrative Assistant; Jean C. McKee, Admissions Coordinator; back row, Robert P. Hubbard, Admissions Officer; Elizabeth E. Moore, Admissions Officer. Not pictured, John C. McClement, Director of Financial Aid; Frank F. DiClemente, Liaison with Alumni Representatives.

4 STEPS TO BE COMPLETED FOR APPLICATION

1 Submit the Preliminary Application Card and the non-refundable \$20 fee as soon as possible. (Checks are payable to the Trustees of Phillips Academy.) **Application will not be considered unless the Preliminary Application Card and Fee are received.**

2 Complete the Personal Interview Requirement. Candidates must complete the required interview by February 1. Candidates are urged to schedule interviews in either the spring, summer, or early fall of the year before they intend to matriculate. It is in everyone's best interests for the interview to take place as early as practicable. A visit to the Academy is desirable as it gives candidates a chance to have questions answered and to see the school. Please allow two hours for the tour and interview and be sure to dress with the weather in mind. **Candidates who cannot visit the Academy are themselves responsible for arranging an interview with an Alumni Representative.** (See page 54.)

3 Return the Final Application Forms. Final application forms, mailed in mid-November to candidates who have filed preliminary applications, should be completed and returned **as soon as final or mid-semester grades are available for the fall term.** The transcript must include current grades for application to be complete. Priority consideration is given to applications completed by the advertised deadline of February 1. ("Late applicants" should return forms immediately. Teacher recommendations should be from current teachers.

4 Take the Secondary School Admissions Test. (12th Grade or Postgraduate candidates are not required to take the SSAT. See next page.)

Secondary School Admissions Test

The Bulletin of Information for Candidates, published by the Educational Testing Service, Princeton, NJ 08540, will be sent by Andover to all 1985-86 candidates who have filed a Preliminary Application. This Bulletin describes the Secondary School Admissions Test, which will be given on the following dates:

December 14, 1985	March 1, 1986
January 18, 1986*	April 26, 1986*
June 25, 1986	

*International administration

Candidates are strongly urged to take the SSAT administered in December, 1985. (The December tests will not be given in foreign countries.) Otherwise, the candidates should take the January, 1986 administration.

Early Decision

Andover does not participate in any early decision plan for admissions.

Twelfth Grade or Postgraduate Candidates

Instead of the Secondary School Admissions Test, Senior and Postgraduate candidates must take the Preliminary Scholastic Aptitude Test of the College Board Scholastic Aptitude Tests (C.E.E.B., Box 592, Princeton, NJ 08540).

Postgraduates are full-fledged members of the Senior Class and are eligible for all school activities. Because of their academic credits, they frequently have maximum flexibility in course selection.

If you have a question:

About Andover's admissions or applications procedures, call or write the Admissions Office.

About an appointment: call or write the Appointment Secretary, Admissions Office.

To request a catalog, call or write:

Admissions Office
Phillips Academy
Andover, Massachusetts 01810
Telephone: (617) 475-3400 x 196

Office hours: Monday through Friday, 8:30 a.m. to 4:30 p.m.
Saturday, 8:30 a.m. to 12:00 noon

"Youth from Every Quarter"

The School's *Constitution*, written in 1778, states that Andover "shall be ever equally open to Youth of requisite qualifications from every quarter." With this principle in mind, the basic requirement for admission to Andover today continues to be evidence of sound character and strong academic achievement. The school is especially interested in candidates who demonstrate maturity and concern for others in addition to high performance in particular studies or activities. Valuing diversity in its student body, the school seeks to bring together a community from all parts of the country and from many nations.

The Admissions Committee selects from over 3,500 candidates the 440 most promising and deserving young people. The school's endowment covers approximately one-third of the cost of an Andover education. Therefore, in fact, every student receives financial aid. In addition, thanks to the generosity of a large number of alumni and friends, further financial assistance is available (see Financial Aid Section, page 53).

School Costs and Financial Aid

Tuition and Fees, 1985 - 1986

The tuition charge for 1985-1986 is \$9,700 for boarding students and \$7,350 for day students.

The average annual cost to educate a student at Andover is approximately \$14,000. The difference between the annual cost and the tuition charge is made up from gifts and income from endowment, which itself is the product of the generosity of alumni, parents and friends.

Day Students

Day students must live in Andover, North Andover, North Reading, Methuen or Lawrence.

Phillips Academy admits students of any sex, race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of sex, race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

To reserve a student's place for a given school year, a deposit in the amount of \$300 must be received by May 1 in the case of a returning student, or by the acceptance deadline in the case of a new admission. It is non-refundable under any circumstances.

The tuition less the above deposit is billed in two equal amounts, with the fall payment due August 1, and the final payment due December 1. The award of scholarship aid or loan reduces the billed amount accordingly.

An alternative is the use of the Insured Tuition Payment Plan, arranged with a private agency. Information about this alternative and an application form are sent to the parents before the first bill is due.

No refund will be made of the fall tuition for any student who withdraws, is dismissed, or is absent for any reason after registration in the fall. No refund will be made against the final payment for any student who withdraws, is dismissed, or is absent for any reason after returning to school at the beginning of the winter trimester.

An optional Tuition Refund Plan is offered, at 3% of tuition, to protect against the departure of a student for any reason. Under this plan 75% of the unused portion of the tuition for school days remaining is refunded.

Tuition covers instruction, board, room (including basic furniture), physical training and most athletic privileges, use of laboratory equipment and material, admission to all authorized athletic contests and most authorized entertainments at George Washington Hall or elsewhere on campus, including the Saturday evening motion pictures.

The school charges do not include tutoring, language training, special instruction in music or certain athletics, materials fees for art courses, medical expenses, laundry, textbooks, dues to school organizations or breakage and damage to school property. The school charges do not include cost of participation in the Washington Intern Program, School Year Abroad, or other off-campus programs. The school provides uniforms and most athletic equipment. Students are required to bring their own footwear and urged to bring along whatever other personal athletic equipment they already possess. Bills for items not included in the school charges may be rendered at any time during the school year.

All charges must be paid by their due date in order to assure a student's place at the Academy. Students with past-due bills may be asked to leave any time. The diploma of the Academy will not be awarded to Seniors whose school accounts are not paid in full by June 1.

Other Expenses

The following expenses will generally be similar to those a student would experience if he or she were at home: athletic equipment; laundry and cleaning; dues and publications and spending money.

Travel expense will vary according to home location. Books and supplies depend on course selection, and are approximately \$575.

Financial Aid

Financial need should never discourage a student from applying for admission to Phillips Academy. Andover selects students for admission on the basis of qualifications, not financial circumstances.

Andover offers full Scholarship Grants for low-income families; Scholarship Grants and low-interest, deferred-payment Student Loans for a broad spectrum of need, and Parent Loans for upper-middle income parents.

Scholarship Grants: \$2,600,000 in 1984-85
Average grant: \$5305

Student Loans: \$231,000 in 1984-85
(presently at 6% interest)

A moderate-interest Parent Loan Program is available to upper-middle income parents who do not qualify for Scholarship Grants or Student Loans, to help them spread educational costs more evenly over the school and college years.

Parent Loans: \$250,000 available in 1984-85
(presently at 12% interest)

If you are not sure whether you qualify for financial aid of some kind, we encourage you to apply; this is the best way to find out.

Because Andover values and seeks an economically diverse student body, aid is awarded only on a



basis of need. In 1985, no qualified student was denied admission for financial reasons.

Need depends on many variables, such as family income, number of children, age of parents, other tuitions, unusual medical expenses, taxes, assets, liabilities, etc.

To apply for financial aid:

1. When you make out the Preliminary Application be sure to check "yes" for Financial Aid.
2. Andover will send you the Parents' Financial Statement (PFS). Fill it out and send the original to the School Scholarship Service in Princeton, NJ. The SSS uses a formula nationally accepted among independent schools to analyze need, and provides Andover with a preliminary estimate of your family's ability to contribute to educational expenses. The process assures that all schools to which a student applies will base their calculations on the same data.
3. Send a copy of the PFS to Andover prior to January 15, along with the most recent IRS 1040 form, or other income tax form used.

Request for aid filed after the January 15 deadline may not be processed in time to be included in the initial allotment of scholarship funds. Requests filed after January 15 must await subsequent availability of scholarship monies.

In case of divorced or separated parents:

The resources of both natural parents must be considered in cases where a divorce or separation has taken place. This information should be provided on the Parents' Financial Statement (PFS). The availability of complete information from both parents is essential to assure a fair assessment of the family contribution. Lack of this information may result in no awarding of aid or an arbitrarily low financial aid package.

Financial aid award letters are mailed in the same envelope as the Certificate of Admission, on March 10.

Parent Loan Plan:

A Parent Loan Plan is available, at a modest rate of interest, to families in the \$40,000 to \$90,000 income range, as their needs require, with preference given to students entering 9th and 10th grades. Repayment of these loans begins immediately, but repayment of the principal is deferred during the students'

college years and then continues for two additional years.

For more detailed information, direct your letter or telephone call to the Director of Financial Aid, Phillips Academy, Andover, MA 01810. Telephone: 617-475-3400 (ext. 196).

Alumni Representatives

While it is advisable from the student's point of view to visit the school, distance frequently renders a visit impractical. When this is the case, the candidate should write or telephone for an interview with the most conveniently located Alumni Representative. (Please see list on page 55.) When you arrange for an interview with an Alumni Representative, please notify the Andover Admissions Office of the date of the interview and the name of the interviewer. This procedure will help us keep your records up to date. A candidate unable to arrange for an Alumni Representative Interview should communicate with the Admissions Office for assistance.

Admissions Travel Schedule

During the fall term Admissions Office representatives plan to be in the following areas:

Oct.	Montreal
Oct.	New York City/Brooklyn/New Jersey
Oct.	Denver/Los Angeles/San Francisco/Oakland
Oct.	Chicago/Detroit/Cleveland/St. Louis
Oct.	Minneapolis/Pittsburg
Nov.	Washington, D.C./Baltimore
Nov.	North Carolina/Philadelphia
Nov.	Dallas-Fort Worth/Houston
Nov.	Atlanta/Miami

ALABAMA

Brirmingham

A. Henry Gaede, Jr. '57
Bradley, Arant, Rose & White
1400 Park Place Tower 35203
(205) 252-4500

ALASKA

Anchorage

John K. Brubaker '55
Delaney, Wiles, Hayes,
Reitman & Brubaker
1007 W. 3rd Ave. 99504
(907) 279-3581

Fairbanks

Kelly A. McMullen '66
Star Route Box 10088 99701
(907) 479-2964

ARIZONA

Flagstaff

Mrs. Robert (Ellen Huntington)
Bryant '65
3 Antoinette Way 86001
(602) 774-5733

Litchfield Park

George T. French '29
P.O. Box 579
609 N. Litchfield Rd. 85340
(602) 935-3216

Phoenix

Mrs. L. Don (Geraldine Treadway)
Miller '47
Arizona Public Service, Station 5629
P.O. Box 21666 85036
(602) 271-2983

Tucson

John S. Greenway '42
2200 E. Elm Street 85719
(602) 325-1541
Prof. Richard L. Morse '53
1939 E. 3rd St. 85719
(602) 884-8860
Donald B. Rollings '70
363 S. Meyer 85701
(602) 622-7984/623-4091

ARKANSAS

Forrest City

Henry Loeb III '39
Growers Equipment Inc.
125 Hill St. 72335
(501) 633-1410



Little Rock

Mose Smith III, M.D. '48
5326 West Markham St. 72205
(501) 664-1527

CALIFORNIA

Anaheim

Don Mitchell
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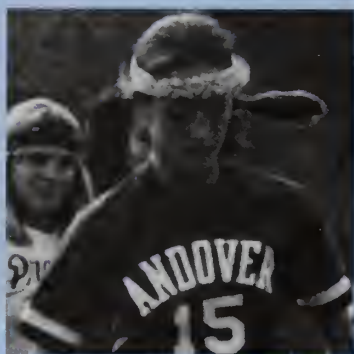
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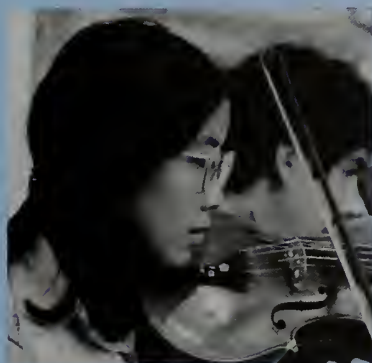
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STATISTICAL INFORMATION for 1984-1985



In 1864 Shimeta Neesima left Japan as a stowaway on the clipper ship "Wild Rover" for America and sold his samurai sword for a Chinese New Testament. He was adopted by the shipowner, an Andover Trustee, was christened Joseph Hardy Neesima, graduated from Andover in 1867, later from Amherst and the Andover Theological Seminary, and became the first Japanese to be ordained a Congregationalist minister. Neesima returned to Japan to found The Doshisha, a great university in Kyoto dedicated to Japanese and Christian ideals. Doshisha recently celebrated its 100th birthday.

Geographical Distribution*

Alabama	2
Alaska	1
Arizona	0
Arkansas	0
California	65
Colorado	12
Connecticut	87
Delaware	4
District of Columbia	13
Florida	23
Georgia	9
Hawaii	2
Idaho	0
Illinois	39
Indiana	9
Iowa	9
Kansas	1
Kentucky	5
Louisiana	2
Maine	17
Maryland	18
Massachusetts	186
Michigan	8
Minnesota	7
Mississippi	5
Missouri	4
Montana	1
Nebraska	3
Nevada	2
New Hampshire	27
New Jersey	31
New Mexico	3
New York	158
North Carolina	14
North Dakota	0
Ohio	23
Oklahoma	1
Oregon	2
Pacific Islands	1
Pennsylvania	28
Rhode Island	4
South Carolina	2
South Dakota	0
Tennessee	3
Texas	16
U.S.V.I. & P.R.	3
Utah	1
Vermont	10
Virginia	17
Washington	0
West Virginia	2
Wisconsin	6
Wyoming	2
Total U.S.	1140

*Based on place of current RESIDENCE, not citizenship.

Bahamas	1
Bermuda	1
Brazil	2
Canada	5
China, Republic of	2
China, Peoples' Republic	3
Colombia	1
Czechoslovakia	1
Ethiopia	1
France	4
Germany	4
Great Britain	1
Guatemala	1
Hong Kong	9
Indonesia	1
Italy	1
Ivory Coast	1
Japan	3
Korea	3
Liberia	1
Morocco	1
Netherlands Antilles	2
Norway	1
Philippines	2
Saudi Arabia	7
Seychelles	1
Singapore	3
Spain	4
Thailand	2
Venezuela	2
Yugoslavia	2
Total Foreign	73
SCHOOL TOTAL	1213

	<u>Girls</u>	<u>Boys</u>	<u>Total</u>
Seniors	175	221	396
Uppers	141	194	335
Loweres	127	196	323
Juniors	66	93	159
	509	704	1213
Total Boarding Students			953
Total Day Students			260
TOTAL			1213

College Matriculations for the Class of 1984

The Class of 1984 applied to 166 different colleges and matriculated at 92 colleges and universities across the country.

COLLEGE	AD- MITTED	MATRIC- ULATED	COLLEGE	AD- MITTED	MATRIC- ULATED	COLLEGE	AD- MITTED	MATRIC- ULATED
Allegheny	2	1	Univ. of Maine	1	1	William & Mary	11	4
Amherst	4	1	MIT	4	3	William Smith	2	1
Barnard	15	4	Univ. of Mass.	17	3	Williams	9	5
Bates	7	2	McGill	6	2	Col. of Wooster	2	1
Beloit	1	1	Michigan State	1	1	Yale	43	22
Boston College	22	9	Univ. of Michigan	41	7			
Boston University	10	1	Middlebury	20	6			
Bowdoin	9	2	Morehouse	1	1			
Brown	65	27	Mt. Holyoke	7	1			
Bryn Mawr	2	1	NYU	4	3			
Univ. of California			UNC	9	2			
Berkeley	54	14	Northwestern	19	10			
Davis	1	1	Oberlin	21	5			
San Diego	1	1	Univ. of Penn.	39	9			
Santa Cruz	4	2	Pine Manor	1	1			
Carleton	2	1	Pomona	7	6			
Carnegie Mellon	9	2	Princeton	19	7			
Univ. of Chicago	8	1	Providence	1	1			
Colgate	9	1	Reed	1	1			
Colorado College	7	3	RPI	3	1			
Col. Schl. of Mines	1	1	R.I. Schl. Design	2	1			
Colorado State	1	1	Univ. of Richmond	3	1			
Univ. of Colorado	7	2	RIT	1	1			
Columbia	31	10	Skidmore	7	1			
Conn. College	22	2	Smith	12	5			
Cornell	23	11	USC	2	1			
Dartmouth	22	13	Stanford	19	11			
Davidson	6	3	Swarthmore	9	2			
Univ. of Delaware	2	1	Univ. of Texas	2	2			
Duke	17	6	Univ. of Toronto	6	1			
Earlham	2	1	Trinity College	25	9			
Emory	10	3	Trinity Univ., TX	1	1			
Fairfield	1	1	Tufts	17	3			
Georgetown	28	11	Union	2	1			
Grinnell	2	1	USAF Academy	2	1			
Hamilton	18	5	Utah State	1	1			
Harvard	47	39	Vanderbilt	16	3			
Harvey Mudd	1	1	Vassar	16	1			
Haverford	5	2	Univ. of Vermont	10	1			
Holy Cross	13	3	Univ. of Virginia	18	4			
Johns Hopkins	23	7	Washington Univ.	9	1			
Kenyon	4	3	Wellesley	11	5			
Lake Forest	3	2	Wesleyan	34	10			
Lehigh	6	2	Wheaton, IL	1	1			

College Admissions

Admission to colleges is not based on a student's mere presence at Andover, but is based on how well the student has used this experience. All selective colleges exercise judgments relative to factors over and above academic ability in selecting a freshman class. While some of these factors relate to exceptional talents in one area or another, others are related to diversity in background and educational objectives.

The college admissions picture is entirely different and infinitely more complex now than it was in past decades. Competition for admission to selective colleges is rigorous, and Andover students are encouraged to apply across a range of choices to colleges with varying degrees of selectivity. The one constant in all of this should be a real desire to educate oneself. To this end the College Counseling Office works with the class as a whole and with each candidate to help each one draw up a list of colleges that makes sense.

Phillips Academy seniors go to college well prepared for the academic program and social experience that lies ahead.





TRUSTEES

MELVILLE CHAPIN '36

A.B., J.D.

President

elected 1974

elected President, 1981

Cambridge, Massachusetts

DONALD W. McNEMAR

B.A., M.A., Ph.D.

Clerk

elected 1981

Andover, Massachusetts

CHARLES APPLETON MEYER '35

A.B.

Treasurer

elected 1969

elected Treasurer 1976

Lake Forest, Illinois

ROBERT LIVINGSTON IRELAND III '38

A.B., LL.B.

elected 1960

New York, New York

GERARD PIEL '33

A.B., D.Sc., Litt.D., L.H.D., LL.D.

elected 1969

New York, New York

WILLIAM WADE BOESCHENSTEIN '44

S.B.

elected 1971

Perrysburg, Ohio

CAROL HARDIN KIMBALL '53

A.B.

elected 1974

New York, New York

RICHARD LEE GELB '41

A.B., M.B.A.

elected 1976

New York, New York

STEPHEN BRADNER BURBANK '64

A.B., J.D.

elected 1980

Philadelphia, Pennsylvania

ELIZABETH PARKER POWELL '56

B.A., M.A., M.B.A.

elected 1980

Wellesley Hills, Massachusetts

FREDERICK W. BEINECKE II '62

B.A., J.D.

elected 1980

New York, New York

THOMAS H. WYMAN '47

B. A.

elected 1980

New York, New York

DAVID M. UNDERWOOD '54

B.A.

elected 1983

Houston, Texas

Alumni Trustees

PHILIP M. DRAKE '43

A.B., LL.B.

elected 1980 for four years

Greenwich, Connecticut

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A.B.

elected 1980 for four years

Sewickley, Pennsylvania

CLINTON J. KENDRICK '61

B.A., M.B.A.

Ex Officio as Chairman

of the Alumni Fund

elected 1981 for two years,

extended to 1985

London, England

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B.A., LL.B.

elected 1982 for two years

Bethesda, Maryland

RICHARD D. LOMBARD '49

B.A., M.B.A.

elected 1982 for four years

Rye, New York

FRANCES YOUNG TANG '57

B.S.

elected 1982 for four years

New York, New York

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A.B.

1956-1960

Lincoln, Massachusetts

CHARLES STAFFORD GAGE '21

A.B., A.M.

1952-1976 (Treasurer 1966-1976)

New Haven, Connecticut

PHILIP KIRKHAM ALLEN '29

A.B.

1969-1980

Andover, Massachusetts

GEORGE BUSH '42

A.B.

1967-1980

Washington, D.C.

DONALD HOLMAN McLEAN, JR. '28

A.B., LL.B.

1958-1981 (President 1968-1981)

Andover, Massachusetts

JOHN LEWIS COOPER '31

A.B.

1968-1981

Dover, Massachusetts

JOHN USHER MONRO '30

A.B.

1958-1983

Jackson, Mississippi

HEADMASTER'S OFFICE

DONALD WILLIAM McNEMAR
Headmaster

B.A., M.A., Ph.D.

PETER QUACKENBUSH McKEE
Associate Headmaster
A.B., Ed.M.

JANE H. MUNROE
*Executive Secretary to the
Headmaster*

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JOHN RICHARDS II
Dean of Faculty
A.B., M.A.T.

WILLIAM FRANKLIN GRAHAM
Clerk of the Faculty
S.B.

THERESA A. LEWANDOWSKI
Secretary to the Dean of Faculty
B.S.

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Dean of Studies
A.B., A.M.

HERBERT HARRY MORTON III
Registrar
A.B.

DAVID A. PENNER
Scheduling Officer
A.B., M.A.

JOAN F. SCHLOTT
Recorder
B.S.

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Dean of Residence
A.B., A.M.

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Abbot Cluster
A.B., A.M.

STEPHEN DOUGLAS CARTER
Pine Knoll Cluster
ScB., M.A.L.S.

CAROL CAMERON RICHARDS
Rabbit Pond Cluster
A.A.

JONATHAN A. STABLEFORD
West Quadrangle South Cluster
A.B., M.A.T.

SYLVIA L. THAYER
Flagstaff Cluster
A.B.

HENRY B. WILMER, JR.
West Quadrangle North Cluster
B.A., M.A.

CARROLL WESLEY BAILEY
Director of Residential Affairs
A.B., J.D.

PRISCILLA K. BELLIZIA
Associate Dean
B.A., M.A.T.

BUSINESS OFFICE

GEORGE A. NEILSON, JR.
Business Manager
B.S., M.Ed.

SUSAN GARTH STOTT
Assistant Business Manager
B.A., M.C.R.P.

DONALD HENRY BADE
Comptroller
B.B.A.

OFFICE OF ADMISSIONS AND FINANCIAL AID

JOSHUA LEWIS MINER
Dean of Admissions
A.B.

MEREDITH PRICE
Associate Dean of Admissions
A.B., M.A.T.

JOHN C. McCLEMENT
Director of Financial Aid
A.B., M.Ed.

JEAN C. McKEE
Admissions Coordinator
A.B.

FRANK F. DiCLEMENTE
Liaison with Alumni Representatives
S.B.

ROBERT P. HULBURD
Admissions Officer
A.B., M.A.

JAMES F. VENTRE
Admissions Officer
A.B.

ELIZABETH E. MOORE
Admissions Officer
B.A.

FACULTY 1983-84

The date following the name indicates the year the instructor joined the Andover faculty. This reflects the faculty for the 1983-84 school year.

DONALD W. McNEMAR
(1981)

Headmaster on the Foundation in honor of John P. Stevens, Jr. '15; Instructor in History and the Social Sciences

B.A., Earlham; M.A. Princeton;
Ph.D. Princeton

PETER QUACKENBUSH McKEE
(1947)

Associate Headmaster; Chairman Physics Dept.; Chairman Science Division; Instructor in Physics on the Donna Brace Ogilvie Teaching Foundation

B.A. Middlebury; Ed.M. Harvard

DOROTHY Y. JUDD (AA 1948)

Instructor in Spanish

B.S. William and Mary; M.A.
Columbia; M.A. Middlebury

GORDON GILMORE BENSLEY
(1949)

Instructor in Art on the Ammi Wright Lancashire Foundation

A.B. Yale

JOHN RICHARD LUX (1949)

Instructor in Mathematics on the Walter Scott Leeds Teaching Foundation

B.S. Pennsylvania State University;
M.S. Ed. University of
Pennsylvania

SHIRLEY J. RITCHIE (AA 1950)

Instructor in Physical Education

B.S. Trenton State College

PHILIP BROWNLIE WELD (1951)

Chairman Chemistry Department, Instructor in Chemistry and Physics on the George Peabody Foundation

B.E. Yale; M.S. University of
Michigan

WILLIAM FRANKLIN GRAHAM (1952)

Clerk of the Faculty; Instructor in Mathematics

S.B. University of Michigan

JOHN CLAIBORNE McCLEMENT (1952)

Instructor in Mathematics on the Cecil F.P. Bancroft Foundation; Director of Financial Aid

A.B. Yale; M.Ed. University of
Pittsburgh

JOSHUA LEWIS MINER III (1952)

Dean of Admissions

A.B. Princeton

JAMES HAROLD COUCH (1953)

Instructor in Spanish

A.B., M.A. University of Wyoming

SHERMAN FREDERICK DRAKE (1953)

Instructor in Mathematics on the Emilie Beldon Cochran Foundation

B.S. U.S. Naval Academy; Ed.M.
Boston University

EDMOND EMERSON HAMMOND, JR.
(1953)

Instructor in Mathematics on the Jonathan French Teaching Foundation

S.B. Haverford; Sc.M. Brown

LOUIS JOHN HOITSMA, JR. (1953)

Instructor in Mathematics

B.S., Ed.M. William and Mary

ROBERT PENNIMAN HULBURD (1953)

Admissions Officer

A.B. Princeton; M.A. Middlebury

ROBERT EDWIN LANE (1955)

Instructor in Latin and Russian on the Alfred Ernest Stearns Foundation

B.A., M.A. University of California
at Berkeley

HAROLD HOLMES OWEN, JR. (1955)

Instructor in English and Theatre, Chairman of Theatre Department

A.B. Amherst; M.A. University of
New Hampshire

THOMAS JOSEPH REGAN (1955)

Instructor in English on the Frederick W. Beinecke Teaching Foundation;

Editor of The Andover Bulletin
B.A. Yale; M.A. Boston University

FRANK McCORD ECCLES (1956)

Instructor in Mathematics on Independence Teaching Foundation Endowment

B.S.M.E. Princeton; M.A. Harvard

HARRISON SCHUYLER ROYCE, JR.
(1956)

Instructor in History and the Social Sciences

A.B. Amherst; M.I.A. School of
International Affairs, Columbia

GERALD SHERTZER (1957)

Instructor in Art

B.F.A., M.F.A. Yale

GEORGE WILLIAM BEST (1958)

Instructor in Mathematics on John Mason Kemper Foundation

B.S. Union College; A.B. Boston
University



CLEMENT MORELL (1958)
Instructor in Mathematics
B.A. Northern Michigan; M.A.
University of Michigan; M.S.
University of Illinois

JOHN RICHARDS II (1959)
*Dean of Faculty; Instructor in History
and the Social Sciences on the Alfred
Lawrence Ripley Foundation*
A.B., M.A.T. Harvard

JOHN PATTEN CHIVERS (1960)
*Chairman, German Department;
Instructor in German*
A.B. Wesleyan; A.M. Middlebury

CARL EDWARD KRUMPE, JR. (1960)
*Dean of Abbot Cluster; Chairman,
Classics Department; Instructor in
Classics and History*
A.B. Wabash College; A.M. Brown

GEORGE HOWARD EDMONDS (1961)
Instructor in English (on leave)
A.B. Amherst; Ed.M. Harvard

MARY SOPHIA MINARD (AA 1961)
*Instructor in History and the
Social Sciences*
B.A. Smith; M.A.L.S. Wesleyan

ALFRED JAMES COULTHARD (1962)
Instructor in Physical Education
S.B. Calvin Coolidge

ROBERT ANDREW LLOYD (1962)
*Instructor in Art on the Independence
Teaching Foundation Endowment*
B.A. Harvard; M.Arch. Harvard
Graduate School of Design

ALANSON PERLEY STEVENS III
(1962)
Instructor in Russian
B.A. Dartmouth; M.A. Yale

THOMAS TOLMAN LYONS (1963)
*Chairman, Department of History and
the Social Sciences; Instructor in
History and the Social Sciences on
Independence Teaching Foundation*
B.A., M.A.T. Harvard

MEREDITH PRICE (1963)
*Associate Dean of Admissions; Instructor
in English*
A.B. Amherst; M.A.T. Harvard

JEAN MARY ST. PIERRE (AA 1963)
*Chairman Department of English;
Instructor in English on Abbot
Academy Teaching Foundation*
A.B. Wheaton, M.A. Columbia

ALEXANDER ZABRISKIE WARREN
(1963)
Instructor in Mathematics
A.B. Harvard; M.A.L.S. Wesleyan

CHRISTOPHER CAPEN COOK
(1964)
*Director of The Addison Gallery of
American Art; Instructor in Art*
A.B. Wesleyan; M.F.A. University of
Illinois

DANIEL DRETZKA OLIVIER (1964)
Instructor in French
A.B. Haverford; M.A. Middlebury

VINCENT PASCUCCI (1964)
*Instructor in Classics and Modern
Languages on the John Charles Phillips
Foundation; Chairman Italian
Department*
A.B., M.A. Columbia; Ph.D. Brown

AUDREY NYE BENSLEY (AA 1965)
Instructor in Art

RONN NELS MINNÉ (1965)
*Instructor in Chemistry on the
Martha Cochran Foundation*
B.S., A.M. Northwestern; Ph.D.
Harvard

ANGEL RUBIO Y MAROTO (1965)
*Instructor in Spanish on Elizabeth
Milbank Anderson Foundation*
Titulo de Bachiller, Titulo del
Magisterio, Universitario, Madrid;
M.A. Washington University

CRISTINA ALONSO RUBIO (AA 1965)
Instructor in Dance
Licensed by the Spanish Academy of
Performing Arts

NATHANIEL BALDWIN SMITH (1965)
Instructor in Mathematics
B.S.E. Princeton; M.A.
Northwestern

HALE STURGES II (1965)
*Chairman Division of Modern
Languages; Instructor in French*
A.B. Harvard; M.A. Middlebury

THOMAS EDWARD CONE, III (1966)
Instructor in Biology
B.S. Trinity; M.A.T. Brown

MICHAEL EDWARD MOSCA (1966)
Director of Accounting
B.A., M.B.A. Boston University

DAVID ALBERT PENNER (1966)
*Scheduling Officer; Instructor in
Mathematics*
B.A. Amherst; M.A. University
of Maryland

JOHN GIBSON TOMLINSON (1966)
Director of Energy Conservation
B.S., U.S. Military Academy

KENNETH KELLY WISE (1966)
*Instructor in English on the William M.
Newman Teaching Foundation*
B.A. Purdue; M.A. Columbia

JAMES LEIGHTON BUNNELL (1967)
*Director of Summer Session;
Instructor in History and the
Social Sciences*
A.B. University of the South;
A.M. Vanderbilt

JOSEPH BELLEAU WENNIK (1967)
*Director of Athletics on the John H.
Castle, Jr. Instructorship; Instructor
in German*
B.A. Yale, M.A. Middlebury

HILDA STROOP WHYTE (AA 1967)
Instructor in Physical Science
B.S. Michigan State University;
M.S. Tufts

JAMES ROBERT WILSON (1967)
Instructor in Chemistry
B.S. Stanford; A.M., Ph.D. Harvard

SAMUEL IRVINE ALLISON ANDERSON
(1968)
Instructor in French
A.B. Harvard; Diplome d'études
University de Paris; A.M. Columbia;
M.A. University of Massachusetts;
M.A. Middlebury

DAVID OWEN COBB (1968)
*Dean of Residence; Instructor
in English*
A.B. University of Maine; A.M.
Middlebury

FRANK LEE HANNAH (1968)
Instructor in Mathematics
A.B., A.M. Dartmouth

ALOYSIUS JOHN HOBAUSZ (1968)
Director of the Audio-Visual Center
S.B. Puskas Telecommunication
Institute, Budapest

NICHOLAS VAN HOUTEN KIP
(1968)
Instructor in Classics
A.B. Princeton; M.A. Trinity

CATHERINE JEANNE KIRKLAND
(AA 1968)
Instructor in French
Licence es Lettres, Maitrise,
Sorbonne

SUSAN McINTOSH LLOYD (AA 1968)
*Instructor in History and the Social
 Sciences and Music on Marguerite
 Capen Hearsey Instructorship*
 A.B. Radcliffe; M.A.T. Harvard

JOHN KENNEDY McMURRAY (1968)
*Chairman Art Department;
 Instructor in Art*
 B.A. Washington and Lee; M.A.T.
 Harvard

CHARLES EMORY APGAR III (1969)
Instructor in Physics
 A.B. Earlham; M.A.T. Brown

SUSAN B. CLARK (AA 1969)
Instructor in Classics and History
 A.B. Swarthmore; M.A. Yale

MARION FINBURY (AA 1969)
College Counselor
 A.B. Vassar

THOMAS ROBERT HAMILTON (1969)
*Chairman Biology Department;
 Instructor in Biology*
 B.S. Tusculum College; M.S.
 University of Pennsylvania;
 M.A.T. Brown

GEORGES NICOLAS KRIVOBOK
 (AA 1969)
*Chairman, Russian Department;
 Instructor in French and Russian*
 B.A. Swarthmore; M.A. Middlebury

CARROLL WESLEY BAILEY (1970)
*Director of Residential Affairs;
 Instructor in English*
 A.B., J.D. University of Pittsburgh

PETER JOSEPH BALEYKO (1970)
Assistant to the Comptroller
 S.B. Boston College

PAUL KALKSTEIN (1970)
*Assistant Director of Athletics,
 Instructor in English*
 A.B. Princeton; M.A.T. Yale

HENRY BOND WILMER, JR. (1970)
*Dean of West Quad North Cluster;
 Instructor in French on John H.
 Porter, Jr. Bicentennial Instructorship*
 B.A. Davidson; M.A. Middlebury

DOUGLAS EVERETT CRABTREE (1971)
*Chairman, Department of Mathematics;
 Instructor in Mathematics*
 A.B. Bowdoin; M.A. Harvard; Ph.D.
 University of North Carolina

ROBERT LEE CRAWFORD (1971)
*Director of College Counseling;
 Instructor in History and the Social
 Sciences*

B.A. Northwestern; S.T.B. The
 General Theological Seminary;
 M.A. University of Pennsylvania

GLENN FRANK BASTIAN (1972)
Instructor in Biology and Theatre
 A.B. University of Pittsburgh

GEORGE MACNAMARA DIX (1972)
Instructor in Modern Languages
 A.B. Brown; A.M. Middlebury

BARBARA E. HAWKES (AA 1972)
Instructor in Biology
 A.B. Tufts; M.A. Northeastern

HENRY LYNN HERBST (1972)
Instructor in French
 A.B. Hamilton; A.M. University of
 Pennsylvania

GEORGE A. NEILSON, JR. (1972)
Business Manager
 B.S., M.Ed. Boston University

STEPHEN B. WICKS (AA 1972)
Instructor in Art

LESLIE BALLARD (1973)
Instructor in Chemistry and Biology
 B.A. Sarah Lawrence; M.A.T.
 Harvard

YOLANDE BAYARD (1973)
Instructor in French
 B.S., M.A. Central Connecticut
 State College

ROBERT PETER PERRIN (1973)
*Instructor in Mathematics
 and Physics*
 B.S., Ph.D. Massachusetts Institute
 of Technology

EDWIN GUSTAVUS QUATTLEBAUM
 III (1973)
*Instructor in History and the
 Social Sciences*
 A.B. Harvard; M.A., Ph.D. University
 of California

NANCY FAUST SIZER (1973)
*Instructor in History and the
 Social Sciences*
 B.A. Wellesley; M.A. Harvard

ELWIN SYKES (1973)
Instructor in English
 A.B., M.A. Harvard

PRISCILLA KEENE BELLIZIA (1974)
Associate Dean
 A.B. Bates; M.A.T. Brown

CAROLYN B. BRECHER (1974)
*Instructor in Modern Dance;
 Assistant in Audio-Visual*
 A.B. Bard

PATRICIA HOPE EDMONDS (1974)
*Director Foundations & Corporate
 Support, Director of the Addison
 Campaign*
 A.B. Mount Holyoke; M.A.T.
 Radcliffe

CHRISTOPHER JUDE GURRY (1974)
*Instructor in History and the
 Social Sciences*
 A.B. Harvard; M.A. Tufts

SALLY CHAMPLIN HERBST (1974)
Instructor in French
 A.B. Mount Holyoke; M.A. Tufts

MARC DANA KOOLEN (1974)
Instructor in Biology
 B.S. St. Lawrence; M.S. Purdue

JEAN CRAWFORD McKEE (1974)
Admissions Coordinator
 B.A. Middlebury

ELAINE SPATZ-RABINOWITZ (1974)
Instructor in Painting
 B.A. Antioch; M.F.A. Tufts
 University and Museum School

NATALIE GILLINGHAM SCHORR (1974)
*Chairman, French Department,
 Instructor in French*
 B.A. McGill; d.e.s. Aix-Marseille;
 M.A. University of Pennsylvania

WILLIAM E. THOMAS (1974)
*Chairman, Music Department;
 Instructor in Music on Lumpkin
 Family Bicentennial Instructorship*
 B.A. Oberlin; M.F.A. Pennsylvania
 State University

DONALD H. BADE (1975)
Comptroller
 B.B.A. University of Wisconsin

HELEN M. ECCLES (1975)
Director of Public Information
 A.B. Bryn Mawr

HERBERT HARRY MORTON III (1975)
Registrar; Instructor in Mathematics
 A.B. Dartmouth

RICHARD H. WILSON, JR. (1975)
Instructor in Music
 B.A. Harvard; M.Mus. New England
 Conservatory of Music

VINCENT B.J. AVERY (1976)
*Chairman, Department of Philosophy
and Religious Studies; Instructor
in Religion and Philosophy*
S.T.L., Ph.D., Academic
Alphonsiana, Rome

SARAH ANNE DOOLITTLE (1976)
Instructor in Physical Education
B.S.Ed. Northeastern

JANETTE ELIZABETH HANNAH (1976)
House Counselor
M.A. Edinburgh University

HARRISON FAIRFIELD McCANN (1976)
President, School Year Abroad
B.A. Williams; M.A. Middlebury

PHYLLIS WENDOVER POWELL (1976)
*Instructor in History and the
Social Sciences*

B.A. Wellesley; M.A. Harvard

CAROL CAMERON RICHARDS (1976)
Dean, Rabbit Pond Cluster
A.A. Bennett

JONATHAN A. STABLEFORD (1976)
*Dean, West Quadrangle South Cluster;
Instructor in English*
B.A. Williams; M.A. T. Wesleyan

REBECCA MILLER SYKES (1976)
House Counselor
A.B. Radcliffe, M.S.W. Simmons

EVERETT GENDLER (1977)
*Jewish Chaplain; Instructor in
Religion and Philosophy*
B.A. University of Chicago; M.H.L.
Jewish Theological Seminary

LOUIS M. BERNIERI (1977)
Instructor in English
A.B. Harvard; M.A. Middlebury

THOMAS SALKALD HODGSON (1977)
Instructor in Religion and Philosophy
B.A. Williams; M.A. Yale

REBECCA D. McCANN (1977)
*Chairman, Spanish Department,
Instructor in Spanish*
A.B. Lake Erie; M.A. Middlebury

DAVID B. POTTLE (1977)
Instructor in Classics
B.A. Northwestern; Ph.D., Tufts

RUTH QUATTLEBAUM (1977)
Instructor in Art
Archivist

A.B. Wheaton; M.A. Columbia

JAMES L. SHELDON (1977)
Curator of Photography
A.B. Cornell

DIANE L. SOUVAIN (1977)
Instructor in Mathematics
A.B. Radcliffe; M.A.L.S. Dartmouth

CHARLES ALLEN WILLAND (1977)
Instructor in Biology
B.S. Brown; M.S. University of
South Carolina

J. PHILIP ZAEDER (1977)
*Protestant Chaplain; Instructor in
English on Samuel Harvey Taylor
Foundation*
B.A., M.Div. Yale

JEANNE E. BUSSIERE STEPHENS
(1978)
Instructor in English
B.A. Dartmouth; M.A. University of
London, Queen Mary College

DAVID M. GRAHAM (1978)
Instructor in Physical Education
B.S. Miami University of Ohio
M.Ed. East Stroudsburg

MARY M. GRAHAM (1978)
House Counselor

MARY J. McCARTHY (1978)
Instructor in Art
A.A. Bay Path Junior College;
B.A. William Paterson College

RANDALL S. PEPPER (1978)
Instructor in English
B.A. Washington & Jefferson; M.A.
University of New Hampshire

BRUCE SMITH (1978)
Instructor in English
B.A., M.A. Bucknell

ALEXANDER THEROUX (1978)
Instructor in English
B.A. St. Francis; M.A., Ph.D.
University of Virginia

JEANNE E. AMSTER (1979)
Dean of Studies
*Instructor in History and
the Social Sciences*
A.B. Mt. Holyoke; M.S. Stanford

CAROLE BRAVERMAN (1979)
Instructor in English
B.A. Brooklyn College; M.A. Purdue

ANDREW J. CLINE (1979)
Instructor in Mathematics
B.A. College of Wooster

ALBERT COONS (1979)
Instructor in Mathematics
B.A. Johns Hopkins

EDWARD B. GERMAIN (1979)
Instructor in English
B.A., M.A., Ph.D.
University of Michigan

ANN H. HARPER (1979)
Instructor in English
B.A. University of Pennsylvania;
M.A. University of Chicago

CARMEL RODRIGUEZ-WALTER
(1979)
Instructor in Spanish and History
B.A. California State University;
M.A. University of California

MARY COMFORT STEVENS (1979)
*Assistant Director of College
Counseling; Associate Director for
Alumni and Parent Affairs*
A.B. Mount Holyoke

SYLVIA LOUISE THAYER (1979)
Dean of Flagstaff Cluster
B.A. Wellesley

SHIRLEY A. VEENEMA (1979)
Instructor in Art
B.A. Bucknell; M.A. Glassboro
State College

DONALD THOMPSON BARRY (1980)
Instructor in Mathematics
B.A. Carleton; M.Div. Yale

MIMI DENTON BRAVAR (1980)
Instructor in Music
B.S. Julliard, M.M. Boston
University

PAMELA BROWN (1980)
*Academic Counselor, Director
Academic Counseling Program*
B.A. Penn State; M.Ed. Boston
College L.D. Certificate Curry
College

STEPHEN DOUGLAS CARTER (1980)
*Dean of Pine Knoll Cluster;
Instructor in Mathematics*
Sc.B. Brown; M.A.L.S. Wesleyan

JENNIFER JORDAN CLINE (1980)
House Counselor
B.A. College of Wooster

BRUCE M. CRAWFORD (1980)
Director of Physical Plant
B.S. Lowell Tech; M.M.S. Lowell
Tech

KATHLEEN MARY DALTON (1980)
*Instructor in History and the
Social Sciences*
B.A. Mills; M.A., Ph.D. Johns
Hopkins

LAURA PARRISH DOBSON (1980)

Instructor in English

B.A. Yale; M.A. Brandeis

LYDIA BUTLER GOETZE (1980)

Instructor in Biology

A.B. Radcliffe; M.A.T. Johns
Hopkins

SUZY C. JOSEPH (1980)

Instructor in French

Licence Anglais, La Sorbonne;
M.A. Indiana University

JONATHAN LOUIS MARLOWE (1980)

*Director of Graham House Counseling
Center; Chairman Department of
Psychology; Instructor in Psychology*
B.A. University of California-Santa
Cruz; M.S., Ph.D. University of
Wisconsin-Milwaukee

ANN MARIE PARKS (1980)

*Director of Central Publications
Office*

BFA, Rhode Island School of Design

J. LAURENCE POWELL (1980)

Consultant to the Science Division
S.B. Massachusetts Institute of
Technology

EDWARD JOSEPH RYAN III (1980)

*Instructor in Physical Education
& Athletic Trainer*
B.S. Northeastern

JAMES WALTER STEPHENS (1980)

Instructor in English

A.B. Princeton; M.A., M.Phil.
Columbia

VICTOR SVEC (1980)

*Acting Chairman Russian Department
1983-84, Instructor in Russian*
B.A. University of Washington

JOSEPH PETER SWAIN (1980)

Instructor in Music

A.B. Dartmouth; A.M., Ph.D.
Harvard

PETER DAVIS WASHBURN (1980)

Instructor in Mathematics
B.A. Syracuse

ELIZABETH EBBOTT WASHBURN (1980)

House Counselor
B.A. Dartmouth

GREGORY JOESPH WILKIN (1980)

Instructor in English

B.A. Yale; M.A. University of
Toronto

J. DEREK WILLIAMS (1980)

*Instructor in History and the
Social Sciences*

B.A. Wesleyan; M.A. University of
North Carolina

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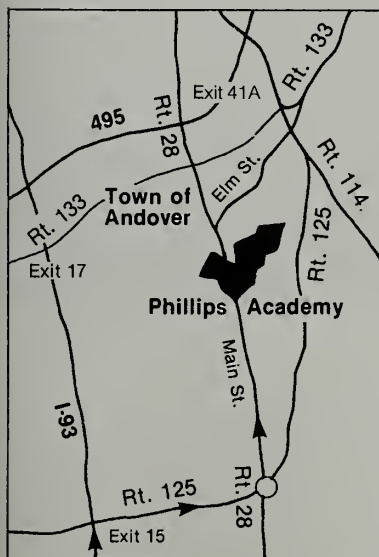
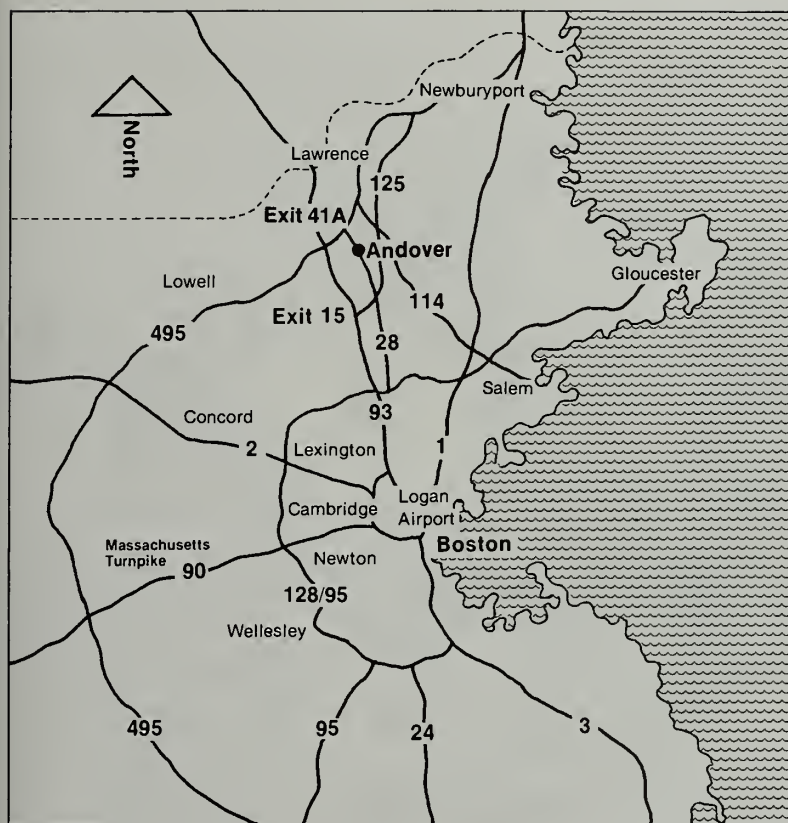
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Inns and Motels in the Area

Andover Inn
Chapel Avenue, Andover
617/475-5903

Holiday Inn
Winthrop Avenue
Lawrence
617/686-9411

Koala Inn
River Road
Andover
617/685-6200

TRAVELING TO ANDOVER

If traveling by car from Boston, take Route 93 north for about 19 miles. Take Exit 15, then turn right (east) on Route 125 for 2 miles. Turn right onto Route 28 and go north about 4 miles to the Andover campus. Turn right at the Bell Tower on the corner of Route 28 and Salem Street. The Admissions Office is the first building on the right.

If driving from Logan Airport, follow the signs to Boston via the Sumner Tunnel and follow Route 93 north signs.

From Route 495 north or south take exit 41A marked Andover and proceed south on Route 28 through the town of Andover. The Phillips Academy campus is approximately one mile south of the Andover center. Turn left on Salem Street, by the Bell Tower.

The Trombly Motor Coach Service runs buses to Andover from the Boston Gray Line, Essex Hotel, 215 Essex St., Dewey Square, Boston. Visitors should call the bus terminal in Boston 617/451-1410 for up-to-date information.

Sheraton Rolling Green Motor Inn
Lowell Street, Andover
617/475-5400

Merrimack Valley Motor Inn
Route 125, Chickering Road
North Andover
617/688-1851

Hendricks' Bed and Breakfast
475-3698



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1985-86
Andover
Course of Study

Phillips Academy

Course of Study

1985-1986

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Course of Study

The curriculum of Phillips Academy comprises a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Placement in the year-level of a subject may be independent of a student's grade in school; through advanced placement at entrance or accelerated courses, many students fulfill requirements ahead of the normal year, thereby gaining increased opportunity for college-level or other elective courses. Instruction is given in all subjects usually required for entrance to higher institutions.

Classroom groups are small enough to permit individual attention, and students are placed in sections fitted to their skill level. Accelerated sequences and advanced courses offer particularly able and well-prepared students opportunity to progress at a rate commensurate with their ability and ambition. Most departments offer courses beyond the level of preparation for college.

For full membership in a given class, students should have credit for the work of the lower classes or its equivalent. However, students are rated as members of a given class if their deficiencies for full membership in it do not exceed a certain number of trimester courses.

Every student is assigned to an Academic Advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements, and the student's particular interests. Students should familiarize themselves with the Academy's basic curriculum—both its requirements and its flexibility.

Members of the Upper Middle and Senior classes should become aware of the entrance requirements of the colleges they may wish to enter.

The Trimester Plan

The academic year is separated into three trimesters. There are two types of weekly class schedules: one during which classes meet only Monday through Friday, and the other during which classes also meet on Saturday morning. There are roughly equal numbers of these five and six-day weeks in each trimester. Within a given week classes are

scheduled to meet according to varying patterns: some for four fifty-minute periods; others for five such periods; and a few seminar and studio courses for two two-hour blocks. Many departments offer year-long courses as well as those which are term-contained (completed in one trimester). The diploma requirements are stated in terms of full-year courses or trimester courses, depending on the academic area involved.

Special courses in Foreign Languages

Special courses covering the work of two years in one are open to qualified Seniors in Chinese, German, Greek, Italian, Latin, Russian, and Spanish. These 10-20 courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and therefore are not recommended for students of limited language ability. Entering Seniors with no previous foreign language experience must pass a 10-20 course as a diploma requirement.

Accelerated Sequences and Advanced Placement

The Andover curriculum offers accelerated sequences in most departments. It provides special programs in Latin, Greek, and the modern foreign languages, designed to cover four years' work in three—or five years' work in four. The programs are open, on invitation of the departments, to especially able and ambitious students.

A large number of Phillips Academy students take College Board Advanced Placement Tests in May to establish advanced placement in college courses or credit toward the college degree.

Advanced Placement Examinations are offered in: American History, Art History, Biology, Chemistry, Computer Science, English, European History, French, German, Latin, Mathematics, Music, Physics, Spanish, and Studio Art (portfolio).

Independent Projects

With the approval of the Dean of Studies and in accordance with requirements established by the Faculty, a student may substitute independent work for some portion of the normal course load. An independent project may replace a given course for up to three trimesters of a student's stay at the Academy, or may replace all courses during

a given trimester. In either case, the work is done under the supervision of a member of the Faculty.

Off-Campus Programs and Projects

The school offers several off-campus residential programs. The *Washington Intern Program*, in which Andover joins with Exeter, allows a group of Upper Middlers and Seniors to spend the Spring Term living together in Washington and working in the offices of U. S. Senators and Congressmen. (See *History 300*.)

Selected students enrolled in Spanish at the third level or higher may elect a residential Winter Term of study in Mexico (see *Spanish 35*), or in Barcelona, Spain, as part of an exchange program.

Selected students of French may participate in a Fall Term exchange in Paris, France, or may spend the Winter Term in Antibes, France, attending local schools and living with a family in the city.

In addition to school-sponsored programs, the trimester plan provides an opportunity for individual Seniors to arrange off-campus projects related to their special interests. Some Seniors have worked as interns with officials in local government and members of the Massachusetts legislature. Others have carried out projects in the arts under the supervision of professionals outside the Faculty. Development of such projects depends upon individual initiative in the investigation of opportunities and careful planning of a course of study that will meet diploma requirements and also free a block of time during the appropriate term. Participation in any off-campus project or program must be approved by the Dean of Studies.

School Year Abroad

Students may elect to spend their Upper Middle or Senior year studying in France or Spain with *School Year Abroad*, originated as an off-campus program by Andover, later joined as a sponsor by Exeter and St. Paul's. Students live with host families, while pursuing a course of study under the supervision of teachers from the three original sponsoring schools. Although *School Year Abroad* is now an independent program, it provides students with courses that earn full academic credit at Andover and with the experience of immersion in a foreign culture. Students wishing to participate should

consult their Academic Advisor and the *School Year Abroad* office (located in Samuel Phillips Hall on the Phillips Academy campus) for guidance in the selection of courses for the years prior to and following the year abroad.

The Mountain School Program

The Mountain School Program or Milton Academy is a semester-long program for eleventh graders which offers students the opportunity to enjoy a different living and learning experience on a 300 acre farm in Vermont. Phillips Academy students may participate Fall Term only. Students will continue their academic courses in addition to activities which will emphasize practical skills and crafts. Students will work on The Mountain School farm which supplies most of the food and heat for the school.

Summer Session

The *Andover Summer Session* is a six-week academic enrichment program for boys and girls of high school age. Students who wish to receive Phillips Academy credit for courses taken at the *Andover Summer Session* must receive prior approval from the chairman of the department involved.

Planning a Program of Studies at Andover

The following is designed to help Andover students and their parents to understand the curriculum, and to show the major decisions, and their consequences, which face students at each stage of the four-year academic program.

Workload

All new students are advised to carry only a normal program of five courses each term in the Junior, Lower Middle, and Upper Middle years. The requirement for the Senior year is four courses or the equivalent of the fourth course—that is, independent work equivalent to a course. Upper Middlers and Seniors may elect to adjust their workload by carrying four courses or five courses in any trimester during their last two years as long as the total for the two years comes to twenty-seven trimester units.

Academic Advising

Each student has an Academic Advisor; this member of the Faculty is responsible for counseling the student in the planning of his or her course of study at Andover. The Advisor meets with the student during the Orientation period prior to the opening of school in September to review the course selections which the student has made during the previous Summer or Spring. The Advisor must approve the selections for the Fall Trimester at this time, and those for the Winter and Spring Trimesters, respectively, during conferences held later in the year.

Within the diploma requirements, programs of study are determined by the student's long-range needs and aspirations—insofar as these can be identified. These needs may include college and career plans, strengths and weaknesses as revealed by previous performance and aptitude tests, and character and personal development.

In addition to the Academic Advisor, the House Counselor or Day Student Counselor must also approve the student's course selection for each trimester. From time to time during the academic year, the Counselor will report to parents concerning the student's growth and progress. Late each spring students in the three lower classes and their respective Academic Advisors will prepare a selection of courses for the coming year; a copy of this selection will be mailed to parents in June.

Although the student is ultimately responsible (within the diploma requirements and other guidelines and policies of the Faculty) for the selection of his or her courses, the Academic Advisor will welcome any information and suggestions that parents may wish to offer.

Arena Day

In general, students register for their courses and selections in an arena setting before each term. Following meetings with their Academic Advisors, students make certain that the desired courses have sections scheduled that permit a conflict-free, workable daily program. Entrance into the arena is by classes and in numerical order according to a randomly chosen, pre-assigned number. Students are advised to have alternate selections in mind in the event that some of the desired sections are full;

enrollment is on a first-come, first-served basis. There is some modification of the Arena Day process for Juniors, new Lowers and new Uppers at the beginning of the Fall Trimester.

Diploma Requirements

The basic diploma requirement is the satisfactory completion of a four-year secondary school program, of which at least three trimesters must be at Andover; the student must be in good standing (not on Probation or under Suspension) at the time of graduation. A student who has been dismissed is ineligible for a diploma unless readmitted.

A student's required program normally includes nine trimester credits in a foreign language, eight in mathematics, three trimester credits in United States History, plus an additional trimester course in history taken at the Upper Middle or Senior level, a full-year course in a laboratory science, one trimester of art (usually *Visual Studies-Art 10*), one trimester of music (usually *The Nature of Music-Music 20*), and nine of English — these to include *English 10* (for ALL entering Juniors), a year-long course of competence in writing and reading and a three-trimester sequence of general literature. In order to be eligible for a diploma all students must satisfy the swim requirement of the Department of Athletics. Certain diploma requirements vary with the class level at which the student enters Phillips Academy. Entering Juniors and Lower Middlers must pass a trimester course in physical education in addition to required athletics; all three and four-year students must pass, prior to graduation, a one-trimester course offered by the Department of Philosophy and Religious Studies. Entering Upper Middlers need pass only one trimester of either art or music at the Academy. Entering Seniors are not required to take either art or music. Some modifications of the language requirement are made for entering Upper Middlers and Seniors. Entering Seniors with no previous foreign language experience must pass a 10-20 course in a foreign language. A Senior must *earn* a minimum of twelve graded trimester credits during the Senior year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Independent Projects are counted as graded courses.

Credits (trimester) required for the diploma are:

For Entering Juniors 54
 For Entering Lowers 51
 For Entering Uppers 48
 For Entering Seniors 48

Newly Admitted Students

Students entering for their first year are sent placement material, including some forms for present teachers to complete and a self-administered diagnostic test in elementary algebra. These items are used by the Academy to aid in proper placement or recommendation of course levels. New students are also asked to complete to the best of their ability a Course Selection form, indicating the courses that they wish to take during the coming year. Although the placement material may alter somewhat a student's preliminary selections, it is helpful, for planning purposes, to know the levels that each student thinks he or she is ready to enter.

The Main Choices at Each Stage of a Four-Year Program

While a student's program of studies is adapted each year to his changing situation, the *future consequences* of each course should be noted, for certain choices in one year open the way to later options and may close the door to others.

Academic Program Guidelines

In order to promote both breadth and depth in students' academic programs, the Faculty has voted the following guidelines, which are in addition to the diploma requirements listed above. These represent what the Faculty *strongly urges* students to do. The Academic Advisors recognize that there will always be some acceptable student programs which do not follow these guidelines.

All Juniors and Lowers should take English, mathematics, and foreign language every term.

By the end of Lower year each four-year student should have taken some history and some science.

By the end of Lower year each four-year student should have taken *Art 10* or *Art 11*.

All Uppers should take English all year.

In their Upper and Senior years students should take a total of at least four trimesters of mathemat-

ics and physical science, with at least one trimester in each of these two areas.

All Seniors should take, during each term, a course in which they do some writing in the English language.

All students will be advised to take some science in addition to the present one-year requirement.

All three and four-year students will be advised to take more than the minimum diploma requirements in the arts (Art, Music, Theatre and Dance).

JUNIOR YEAR

Each trimester a Junior must take five courses, only one of which may be a Pass/Fail course. Students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring.

In selecting courses, students are reminded to check the diploma requirements. A Junior's program should resemble the following outline:

1. Math—enter the sequence by placement of the Department;
 2. Foreign Language—begin sequence (usually a yearlong course at the 10-level);
 3. English—*English 10*
 4. Elective
 5. Elective
- | |
|---|
| Art, Classics, Computer, History,
another Math, another Lan-
guage, Music, Physical Educa-
tion, RelPhil, Science, Interdisci-
plinary, Theatre, Dance. |
|---|

LOWER MIDDLE YEAR

Each trimester a Lower Middler must take five courses, only one of which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. A few students take the CEEB Achievement Tests during the Lower Middle year. In selecting courses, students are reminded to check the diploma requirements. A Lower's program should resemble the following outline:

New Students

1. Math—enter the sequence by placement of the Department;
2. Foreign Language—enter the sequence by placement of the Department;
3. English—enter sequence (*Competence*);

4. Elective [Art, Classics, Computer, History,
5. Elective [another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]

Returning Students

1. Math—continue the sequence (usually *Mathematics 20 (T2), 32*);
2. Foreign Language—continue the sequence;
3. English—continue sequence (*Competence*);
4. Elective [Art, Classics, Computer, History,
5. Elective [another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Theatre, Dance.]

N.B.

Students planning to be off-campus for a term (e.g., *Term in Mexico, Washington Intern Program*, etc.) **should make sure they have no year-long courses during that year.** Students wishing to participate in the *School Year Abroad Program* during their Upper Middle year should discuss these plans with their Academic Advisor and seek guidance for the selection of courses for the Lower Middle year. Participation in any off-campus project or program must be approved by the Dean of Studies.

UPPER MIDDLE YEAR

During the Upper Middle and the Senior years, a student must accumulate a total of 27 trimester units in blocks of four or five courses per trimester. A Pass/Fail course may be elected as a fifth course only.

New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many students take the CEEB Preliminary Scholastic Aptitude Tests in the Fall; all take the CEEB Scholastic Aptitude Tests in the Winter; and many take the CEEB Achievement Tests in the Spring of their Upper Middle year. Some also take the CEEB Advanced Placement Tests in the Spring of their Upper Middle Year. As a matter of general policy Academic Advisors encourage "depth" in the selection of courses for the Upper Middle Year. Many students satisfy their United States History requirement during their Upper Year. In selecting courses students are reminded to check the diploma require-

ments. An Upper's program should resemble the following outline:

New Students

1. Math—enter the sequence by placement of the Department;
2. Foreign Language—enter the sequence by placement of the Department;
3. English—begin sequence (*Competence*);
4. Elective [Art, Computer, History, another
5. Elective [Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

Returning Students

1. Math—continue the sequence (usually *Mathematics 35 (T2)*);
2. Foreign Language—continue the sequence;
3. English—continue the sequence (usually *Lit B (T2), Lit C*);
4. History—usually *History 300 (T2), 301 (The United States)*;
5. Elective [Art, Computer, another English, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

N.B.

Students wishing to take an *Off-Campus Independent Project* for a trimester of their Senior year must have no yearlong courses during their Senior year. Participation in any off-campus project or program must be approved by the Dean of Studies.

SENIOR YEAR

During the Upper Middle year and the Senior year, a student must accumulate a total of 27 trimester units in blocks of four or five courses per trimester. A Pass/Fail course may be elected only as a fifth course; however, an Independent Project, though marked on a Pass/Fail basis, is counted as a graded course.

A Senior must *earn* a minimum of twelve graded trimester credits during the Senior year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Many Seniors retake the CEEB Scholastic Aptitude Tests in December and the CEEB Achievement Tests in January, and take the CEEB Advanced Placement Tests

in May. In selecting courses students are reminded to check the diploma requirements. A Senior's program should resemble the following outline:

New Students

1. Math—enter the sequence by placement of the Department; if the requirement is not yet satisfied enter *Mathematics 40*;
2. Foreign Language—enter the sequence by placement of the Department if the requirement is not satisfied;
3. English—usually *English 300-12*;
4. Elective [Art, Computer, another English,
5. Elective [History, another Math, a 10-20 Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

Returning Students

Usually most diploma requirements have been satisfied. Careful selection of electives for continued depth in the student's chosen areas is encouraged.

Transferring and Dropping Courses

To transfer or drop a course, a student must obtain an official transfer slip from his or her Academic Advisor. This slip is then taken *as soon as possible* to the Scheduling Officer in George Washington Hall. Transfers into term-contained courses must take place during the first six calendar class days of the term. No course may be dropped after the end of the fourth week of classes of any term. Students wishing to drop year-long or T2 courses prior to the normal end of the course, and after the first six calendar class days of the course, may do so only by gaining the approval of a group of five: the Department Chairman, the Dean of Studies, the student's House Counselor, Academic Advisor, and Instructor. Credit is granted at the discretion of the Department Chairman and only if the student is passing the course at the time it is dropped and only for that portion completed. Year-long and T2 courses are considered as long-term commitments.

Attendance

Students are expected to attend all academic classes.

Instructors, if approached in advance, are permitted (but not required) to excuse students from a

class meeting if the absence from that meeting will not add to weekend time. Only Cluster Deans may give permission to extend weekend time, and they may do so without consulting Instructors.

Failed Courses

In most cases, continuing students may attempt to receive credit for a failed course by taking a make-up examination. Spring Term Senior failures may be made up only following Commencement.

Personal Computers

Though there is no expectation that they do so, students are permitted to bring personal computers to the School and keep them in dormitory rooms (providing the monitor may not also be used as a television receiver). However, Phillips Academy can assume no responsibility for the care, security, or maintenance of these student-owned units. Further information concerning personal computers is available, upon request, from the office of the Dean of Residence.

College Entrance Examination Board Test Dates

Tests will be held on campus in 1985-86 as follows:

October 19	PSAT/NMSQT (<i>Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test</i>)
November 2	SAT/ACH
December 7	SAT/ACH
January 25	SAT/ACH
May 3	SAT/ACH
June 7	SAT/ACH
May 5-16	AP (<i>Advanced Placement Examinations</i>)

Key to Course Designation

A course number ending in "0" denotes a yearlong course (Example: *Math 10-0*). A number ending "123" indicates that the course is term-contained, but sequential, and may be taken for one, two, or three terms (Example: *Art 26-123*). A number ending in a single digit "1," "2," or "3" indicates a course, that is term-contained, but one that may be

taken only once. (Example: *Music 20-2*). The designations 1, 2, and 3 indicate the trimester during which the course is offered: 1 = Fall; 2 = Winter; 3 = Spring. Some courses require a two-term commitment; they are indicated by a "(T2)" following the course name. (Example: *Physics 52-12 Advanced Placement Physics (T2)*). Check carefully each course description for any other limitations: Prerequisites, permission of Instructor or Department Chairman required, etc.

Immediately below each course number is a 4-digit number in parentheses. This identification number (often referred to as the "computer number") is used for data-processing files and is required when a student registers for courses. The final digit of the computer number has roughly the same meaning as the last digit of the course number:

Final Digit:	Indicates:
0	Yearlong course
1	Course offered in Fall Trimester
2	Course offered in Winter Trimester
3	Course offered in Spring Trimester
4	T2 course offered in Fall and Winter
5	T2 course offered in Winter and Spring

Course Descriptions

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers a term-contained course as an elective.

- 25—1 **Archaeology**
 (8801) Four prepared classes. Open to Upper
 25—2 Middlers and Seniors. Limit 15 students.
 (8802) The course explores the methods archaeologists use to reconstruct pre-historic societies
 25—3 and to test general statements concerning
 (8803) how and why these societies came to be the way they were. In doing this, several major transformations in human society are considered, beginning with the society of the earliest men, and ending with the first civilizations. Lecture and class discussions are supplemented by visual aids and work with archaeological specimens. A brief excavation may be conducted locally.

Art

The diploma requirement in Art is as follows: entering Juniors and Lower must take a trimester course in a Studio Art; an entering Upper must take a trimester course in a Studio Art or Music at the Academy; neither a Pass/Fail course nor an Art History Course is accepted as fulfilling the requirement. The basic course, *Visual Studies*, covers a broad range of material, is open to students of all abilities and experience, and is a prerequisite to almost all elective courses in art. Exemption from this **prerequisite** is granted only on the basis of a portfolio of work judged satisfactory by the Chairman of the Department in collaboration with the teacher of the course which the student desires to enter. An acceptable portfolio should contain examples of two-dimensional work, three-dimensional work (slides or photographs are acceptable), and photography.

The College Entrance Examination Board offers students the opportunity to gain Advanced Placement in Studio Art in many colleges and art schools, thus enabling a student to by-pass basic design courses. Students must submit a portfolio of slides and original work to Princeton in May. Students interested in Advanced Placement should enroll in *Art 315-1* and two subsequent terms in art.

Students wishing to apply for an independent project in photography will not be eligible until they have taken *Art 12*, *Art 26*, and two terms of *Art 306*.

With the exception of *Art 40* and *41*, no art course, if failed, can be made up by examination.

Students should expect to help pay for art materials.

Cameras are available for loan to scholarship students taking photography.

INTRODUCTORY STUDIO COURSES

- 10—1 **Visual Studies**
 (0101) Five prepared class periods. Not recommended for Juniors. In its emphasis on visual observation, interpretation, and organization, the basic course is designed to provide an understanding of how visual information is made and transmitted. Along with discus-

sion of design problems, the student receives experience in photography, drawing, two-dimensional design, and three-dimensional construction. Previous experience in art is not required.

11—12 Visual Studies for Juniors (T2) (a two-term commitment)

11—23 Four prepared periods. Strongly recommended for Juniors. This course introduces students to the language of vision through drawing, photography, video, color, structure, and two and three dimensional design. Studio projects are coordinated with visits to the Addison Gallery where students study original works of art that instruct and clarify their own art making activity. The course will fulfill the diploma requirement in art and will serve as the equivalent of *Art 10* as a prerequisite for other art courses.

12—1 Introductory Photography

(0121) **Prerequisite:** *Visual Studies (Art 10 or Art 11)*

12—2 An introduction to basic out-of-doors photography, the course covers fundamentals of exposure, developing and printmaking. A camera (35 mm. or 2 1/4) with manually controlled speed, aperture and focus is required;

a light meter is not necessary. (Scholarship students may borrow cameras from the school.) Emphasis is on both darkroom technique and aesthetic quality. This course may be bypassed by students with previous experience through the presentation of a portfolio. Classes meet twice a week with six hours of preparation and weekly conferences with the teacher.

14—1 Introductory Ceramics

(0141) Four classes per week plus evening studios.

14—2 Basic techniques of hand-building, wheel-throwing, and glazing. Emphasis on the sculptural as well as the functional possibilities of clay. At least one raku firing each term, or a similar special project. No prerequisites, and does not fulfill the diploma requirement.

15—1 Introductory Design

(0151) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

15—2 A course designed for students who, having completed *Art 10* or *Art 11* would like to continue in an art course less specialized than the other electives available in art. This course continues the exploration of visual

communication begun in *Visual Studies*, using a variety of media. Students work in several different forms of two and three-dimensional art, exploring their relationships and developing some familiarity with the concepts

dealt with in more specialized courses. Not open to Juniors.

INTERMEDIATE STUDIO COURSES

Unless otherwise noted, the intermediate courses consist of four prepared classes each week. *Visual Studies (Art 10 or Art 11)* is a prerequisite for all intermediate courses. Any of these courses may be taken more than once to increase proficiency, as the courses are designed to deal with individual needs.

20—1 Drawing and Two-Dimensional Design

(0201) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

A course designed to develop drawing and two-dimensional composition skills. Drawing includes: life drawing, still life, and mono-printing. Two-dimensional design will deal with the organization of representational images, color, painting and collage. Continuation in *Drawing (Art 20-23)* or *Two Dimensional Design (Art 23-23)* in Winter or Spring is recommended.

20—23 Drawing

(0202) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

(0203) A course designed to develop observation and drawing skills in several media, based on the assumption that drawing is an end in itself as well as a skill basic to other media. Included: one life-drawing session each week. (Ms. Veenema and Mr. McMurray)

23—23 Two-Dimensional Design

(0232) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

(0233) The course deals with one's ability to manipulate those elements most associated with the picture plane: color, line, shape, texture, and composition of flat materials. Work includes: 1) color—free studies and collages dealing with the structural and expressive nature of color; 2) drawing—exercises using pencil, pen, and brush, figure and landscape drawing; and 3) figure-ground—expanding the structural and illusionary aspects of figure-ground as an end in itself and as a basis for graphic and advertising design. (Mr. Shertzer)

24—23 Three-Dimensional Design (T2 or Art 11) (a two-term commitment)

Prerequisite: *Visual Studies (Art 10 or Art 11).*

This course identifies some basic areas of concern—equilibrium, economy, function, scale—within an ecological frame of reference. Studio problems in design and construction will draw on the student's ability to learn and apply problem-solving techniques creatively;

discussion and written exercises will ask the student to think about design as it defines the human enterprise. An introductory course in physics, chemistry or biology, taken previously or concurrently, will be helpful. (Mr. Lloyd)

26—123 Intermediate Photography

(0261) **Prerequisite:** Art 12. An extension of *Introductory Photography*, the course goes deeper into technical proficiency and aesthetic quality. Technical aspects include metering techniques, black and white filters, exposure and printing contrast controls, various developing styles and darkroom deviations. A camera and light meter are required. The student will be exposed to the works of various photographers so that he may gain a better sense of his own photographic style and identity. Classes meet twice a week with six hours of preparation and weekly conferences with the teacher.

27—13 Animation

(0271) **Prerequisite:** *Visual Studies (Art 10 or Art 11)*.
(0273) An introduction to the art of illusion of motion through shooting still images frame by frame with 16mm sound motion picture film, with emphasis on making a very concise and carefully planned statement. Students may work in computer animation. (Mr. McMurray)

HISTORY OF ART COURSES

40—1 History of Art: Painting and Sculpture

(0401) Four prepared class periods. For Uppers and Seniors. Although a survey of Western Art from the cave painter to contemporary, the course examines four present-day directions by studying the historical styles as roots leading up to our time, with an emphasis on the 20th Century. (Mr. Bensley)

41—2 History of Art: Architecture

(0412) Four prepared class periods. For Uppers and Seniors. A survey of architecture and engineering from priestly civilizations to the present, the course emphasizes the architectural style as an expressive outgrowth of the culture that produced it. Combined with Art 40-1, this course should prepare students for the Advanced Placement Examination in Art History. (Mr. Bensley)

ADVANCED STUDIO COURSES

Visual Studies (Art 10 or 11) is a **prerequisite** for all advanced courses. These courses may be taken more than once. Unless otherwise noted, Advanced Studio courses meet four hours a week with four more hours required in the studio.

300—123 Graphics and Photography

(0701) **Prerequisite:** *Visual Studies (Art 10 or Art 11)*.
(0702) Applying photography to graphic arts, particularly through photo-silkscreen, photo-etching, computer graphics, and photo-lithography. Individual experimentation is emphasized in an attempt to carry the expressive force of photography beyond darkroom techniques. (Mr. McMurray)

302—123 Painting

(0721) **Prerequisite:** *Visual Studies (Art 10 or Art 11)*.
(0722) An introduction to the basic elements and techniques of painting in oils. Specific problems are assigned to study the fundamentals of color, composition and space in painting, as well as to encourage the student's individual expression. Class critiques and discussions, slides, reproductions, films and occasional field trips are also part of the course. Previous experience is helpful but not necessary; students are encouraged to sign up for the full year if possible. (Ms. Spatz-Rabinowitz)

303—1 Filmmaking

(0731) **Prerequisite:** *Visual Studies (Art 10 or Art 11)*.
This course combines viewing theatrical, documentary, and art films for discussion and criticism with the production of individual or group student films in super-8 and video. Course work will include developing film ideas, scriptwriting, shooting, cutting, editing, and class critiques. (Mr. Bensley)

304—12 Advanced Ceramics

(0741) **Prerequisite:** *Visual Studies (Art 10 or Art 11)*.
(0742) For those who are seriously interested in the total operation from design to execution. Hand-building, wheel-throwing, glazemaking (and some chemical analysis), responsibility for loading and firing electric, gas, raku, and salt kilns. Assigned reading and occasional field trips. Previous experience in clay is desirable. (Mrs. Bensley)

305—3 Printmaking

(0753) **Prerequisite:** *Visual Studies (Art 10 or Art 11)*.
This course aims to give a student knowl-

edge of different drawing techniques using printmaking media. Students work with metal plate etching and dry point techniques, collagraph, linoleum or wood block printing, and plate lithography. Printmaking media allows students to see the successive conceptual stages an artist goes through in developing an image and encourages them to look at the many possible forms their images could take rather than focusing on one final product. (Ms. Veenema)

306 Advanced Photography

Prerequisites: *Introductory Photography* (Art 12) and *Intermediate Photography* (Art 26).

306-I-13 Photojournalism. A photograph is a multi-dimensional experience. It can serve to recall (0761) persons or events; it can inform, inspire, and (0763) raise questions. It is a way of sharing an experience and one's relationship to it. The subject of this course is taking photographs that are deeply and personally felt and which, at the same time, can communicate to a wide audience. The commentary and images of several celebrated photographers will be presented for discussion. Projects will include individual photographs, essays, picture stories, journals, biographies, etc. While independent work is expected, some assignments will be given. (Mr. Wicks)

306-II-1 Large Format Photography. The special qualities of the large camera open up a new (0771) world of image making which alters the relationship of photographer to subject and creates options different from the smaller formats. View camera swings and tilts, perspective and depth of field control, sheet film processing, advanced metering and exposure methods, and techniques of the fine photographic print are covered. Students may work in color or black and white. A survey of the aesthetic and stylistic development of photography in the nineteenth and twentieth centuries is taught. Students explore the many possible approaches to their own photography in this historical context. Extensive use is made of the Addison Gallery's collection of original photographs. Large format cameras are provided. (Ms. McCarthy)

306-III-2 Studio Photography. Concentrating on (0782) portraiture and fashion photography, studio strobes are used to achieve controlled lighting. Through various darkroom techniques and manipulation, along with individual experimentation, an attempt will be made to express personal ideas. Utilizing professional models from Boston agencies, the course is an introduction to commercial photography. (Mr. Bensley)

306-IV-3 Photoillustration. Communication of (0793) thoughts, feelings, and dreams in an imaginative and personal manner is the main goal of photoillustration. Through various darkroom techniques and manipulation, along with individual experimentation, an attempt will be made to express personal ideas. Initial projects will be assigned to enhance experimentation and problem-solving, followed by independent work to be presented sequentially in book format. The course includes group critiques and discussion of works by several photographers. (Ms. McCarthy)

308-23 Sculpture

(0882) **Prerequisite:** *Visual Studies* (Art 10 or Art 11).
(0883) Offers an opportunity to work in practically every material available to the sculptor today, including wood, stone, metal, plastics, plaster, and others. It is therefore possible for students to develop into sculpture concepts discovered in *Visual Studies* (Art 10) or *Three-Dimensional Design* (Art 24) as well as ideas drawn from their own experience. Some outstanding work of recent classes includes the "avocado" by Seymour House '73, a thirty-foot welded construction which is now a permanent addition to the Underwood courtyard. Individual criticism is stressed. (Mr. Shertzer)

309-3 Kinetics

(0893) **Prerequisite:** *Visual Studies* (Art 10 or Art 11).
A search for the aesthetics of movement. Individual inventiveness is stressed as students pursue projects directed toward devices that produce implied or real motion. Self-perpetuated problem-solving situations become one of the prime values and objectives of the course. Projects range from simple mobiles and mechanical sculptures to computer graphics. (Mr. McMurray)

310-123 Architecture

(0901) **Prerequisite:** *Visual Studies* (Art 10 or Art 11).
(0902) For Uppers and Seniors. *Three-Dimensional Design* (Art 24) recommended, but not required. (0903) The design of structures for human habitation involves a variety of basic considerations. In the Fall, the course will concentrate on functional analysis of sheltered spaces and their organization. The Winter Term will survey methods of enclosing spaces at different scales and construction techniques, including some architectural detailing. The Spring Term will combine knowledge gained in the previous terms in a project or projects simulating the experience of architectural practice. The course fills the needs of students who are considering architecture as a field of concentration as well as of those who desire familiarity with the basics of environmental design. Although students are encour-

aged to take the course for three terms, each segment is planned to accommodate enrollment for that term alone. (Mr. Lloyd)

311—3 Contemporary Communications

(0913) Four prepared class periods. The course examines some of the bases of communication between and among people. Material includes fiction, non-fiction, poetry, drama, motion pictures, and the visual arts. **Prerequisites:** Successful completion of a course in art, music, or theatre. The course engages in group projects aimed at public presentation. (Mr. Owen, Mr. Lloyd)

314—3 Calligraphy: The Art of Lettering by Hand

(0943) **Prerequisite:** *Visual Studies* (Art 10 or Art 11). Four prepared class periods. A course designed to develop basic techniques of fine hand lettering beginning with Roman capitals and tracing the historical developments of letter construction, integrating form and function. Practical applications can range from simple matter quotations to illuminated manuscript work. Applications of computer graphics are explored. (Mrs. Quattlebaum)

315—1 Advanced Placement in Studio Art

(0951) **Prerequisite:** *Visual Studies* (Art 10 or Art 11) and two art courses. For Seniors who have taken at least two art courses beyond *Visual Studies*, and can be recommended by the teachers of those courses. This course is a seminar run via weekly critique sessions with instructor, and in which each student is expected to do at least nine hours of outside, independent work in preparation of her or his portfolio for Advanced Placement or for other use. A student enrolled in this course should plan to take at least one art course or project in Winter and Spring Terms. (Ms. Veenema)

The Classics

The foreign language diploma requirement is competence at the third-year level of a modern or ancient language. Such competence in Latin or Greek is usually established by completing the ninth trimester. Able students may fulfill the requirement at the end of the eighth, or even the seventh, trimester by passing a special examination set by the Department.

Two sequences are offered in Latin, the regular sequence of *Latin 10, 20, 30, 40, and 50*, and an

accelerated sequence of *Latin 10, 25, 35, and 50*. In Greek the regular sequence is *Greek 10, 20, 30, and 40*, though Upper Middlers wishing to accelerate may want to consider *Greek 10-20* followed by *Greek 30*.

Through the study of Greek and Latin the Department of Classics offers students a direct entry into Greek literature, which is still unsurpassed in excellence, and into Latin, which, as the universal language of church, court, and scholars throughout the formative years of modern Europe, can rightly be termed the mother tongue of Western Civilization, and the surest index to its meaning.

Students have traditionally studied Latin before going on to the study of Greek. However, Greek is equally appropriate as a first language since it is not more difficult than Latin. The Greek alphabet is easily mastered in the first few class meetings, and students quickly discover that the Greek language has poetic and expressive qualities which stimulate the imagination and illuminate man's political and intellectual development.

In addition to language courses, there are survey courses which require no knowledge of Greek and Latin. Through them the Department makes available to all Andover students a broad introduction to Classical civilization: history, literature, mythology, epic, and etymology.

GREEK COURSES

10—0 Greek, First Level

(5010) Five prepared class periods. The course introduces the student directly to the Classical Greek of Periclean Athens through a series of readings which present not only the vocabulary, forms and syntax of the language but also the thoughts, feelings and actions that exemplify the Greek genius. Though preliminary selections are necessarily simplified, within the first year students are reading excerpts from Plato, Aristophanes, Euripides and Homer.

10-20—0 Greek, First and Second Level, Accelerated

(5020) Five prepared class periods. The course is open to Seniors and Uppers. It covers in one year the essential material of *Greek 10* and *Greek 20*: basic forms and structure, along with ample selected readings from Xenophon and Plato, as an introduction to Greek literature.

13—1 Introduction to Greek

- (5031) Four prepared class periods. The course is for students whose curiosity for the Greek language and literature has been aroused by their studies in other areas. For students

who plan some day to study Russian or German, this course provides an excellent introduction into the intricacies of a highly inflected language. The student is also treated to an inside preview of a literature which, over the centuries, has provided inspiration and models for the literature of the Western World. It is a term-contained course, but students wishing to continue with Greek will have the opportunity to do so.

20—0 Greek, Second Level

- (5040) Five prepared class periods. The course continues the format of *Greek 10*, with further systematic development of reading skills and control of vocabulary, forms and syntax through the medium of more advanced selections from the Greek masterpieces, always with the purpose of understanding the spirit of the people that produced them.

30—0 Greek: Iliad and Odyssey

- (5050) Four prepared class periods. Selected books of the *Iliad* and the *Odyssey*, and sometimes a play of Euripides. Students examine the nature of tragedy, heroism, and self-discovery.

40—123 Greek: Historians, Tragedians, Lyric Poets

- (5061) Four prepared class periods. In the Fall Term ancient concepts of justice and morality are examined through the works of Herodotus and Thucydides. Human tragedy is explored in a play of Sophocles or Euripides in the Winter Term. The Spring Term is devoted to the study of emotion and self-expression in the Greek lyric poets.

LATIN COURSES**10—0 Latin, First Level**

- (5110) Five prepared class periods. The purpose of the course is to prepare students for general reading in Latin. To that end, thorough training is given in the basic vocabulary, forms and syntax of the language (including all participles, infinitives and subjunctives) along with practice in sight reading. Frequent attention is paid to the relationship of Latin to English. Surveys of Roman history and civilization provide an introduction to "the grandeur that was Rome."

10-20—0 Latin, First and Second Level, Accelerated

- (5120) Five prepared class periods. For Upper Middlers and Seniors. A year-long accelerated introductory course covering the essential elements of *Latin 10* and *Latin 20*.

13—1 Introduction to Latin

- (5141) Four prepared class periods. The course is for students seeking an introduction to the Latin language, or those whose studies in other languages (including English) have aroused their curiosity about the workings of languages (grammar, syntax and vocabulary). It offers special profit and fascination to students of French, Spanish, and Italian, since it illuminates much of what they already know by acquainting them with the mother language. For students who plan some day to study Russian or German it serves as an introduction to the workings of highly inflected languages. It is a term-contained course, but students wishing to continue with Latin will have the opportunity to do so.

20—0 Latin, Second Level: Selected Prose Authors

- (5150) Five prepared class periods. During the first term, the course gives a thorough review of the fundamentals of Latin grammar and begins the reading of Caesar. Caesar's account of his campaigns gives the student insight into the problems of political ambition and international intrigue. The character values to which the Romans attributed their success are examined in readings from Nepos and Livy on the lives of ancient heroes. New students whose first-year Latin course has been less complete than *Latin 10* may be placed by the Department Chairman in a special section of *Latin 20* appropriate to their needs.

25—0 Latin, Accelerated Second Level

- (5160) Five prepared class periods. Open to students who have completed *Latin 10* with high honors and to other qualified students, at the invitation of the Department. After a thorough grammar review in the Fall, the course moves through selections from Caesar in the Winter and into Cicero by Spring, with a sampling of the poetry of Ovid as time permits. There is practice in sight translation and prose composition. Texts are essentially the same as for *Latin 20* and *Latin 30*. Successful completion of *Latin 25* enables one to enter *Latin 35* the next Fall.

30—0 Latin, Third Level: Cicero, Sallust, Vergil

- (5170) Four prepared class periods. Through the writings of Cicero and a variety of other au-

thors, students learn to read Latin prose with increasing ease. The course presents a picture of Cicero's life and times and compares the political unrest and maneuvering of his time with that of our own. The literary importance of Cicero as the creator of a prose style which had a dominant influence on the literature of Europe for centuries is assessed. In the Spring Trimester the student is introduced to Roman poetry through readings in Vergil's *Aeneid*, Book II. The student will begin to understand how Vergil, as heir to the Homeric tradition, gave to epic and to Western poetry in the generations that followed him their definitive form. New students whose first and second-year Latin courses have been less complete than *Latin 10* and *Latin 20* may be placed by the Department Chairman in a special section of *Latin 30* appropriate to their needs, or in *Latin 25*.

35—0 Latin, Accelerated Third Level

(5180) Five prepared class periods. Open to students who have successfully completed *Latin 25* and to other qualified students at the invitation of the Department Chairman. The course reads extensively in Vergil's *Aeneid* (Books I, II, IV and VI), covering most of the Spring Trimester's reading in *Latin 30* and the year's reading in *Latin 40*. The student thereby gains credit for the fourth-year level and is eligible both to take the Latin Advanced Placement Examination, in the Spring, and to enroll in *Latin 50* the next Fall.

40—123 Vergil's *Aeneid*

(5191) Four prepared class periods. Through a
(5192) thoughtful reading of Vergil's *Aeneid*, students
(5193) are introduced to the great classical traditions of epic poetry. The literary form and beautiful, symbolic content of the *Aeneid* become familiar as the model and inspiration of our western poetical heritage. Homer, as Vergil's well-loved and frequently emulated model, is read in translation; the comparison and contrast of the Homeric tradition with Vergil provide a clear understanding of the Latin author's techniques and purpose. Students electing *Latin 40* all three trimesters will be well prepared to take the Latin Advanced Placement Examination, in the Spring.

50—123 Livy and Tacitus; Roman Comedy; Horace and Catullus

(5201) and
(5202) Four prepared class periods, one unprepared
(5203) period devoted to sight work. The course includes preparation for the Latin Advanced Placement Examination. In the Fall Term, selections from Livy's *Histories* give students insight into the foundations of some of the Western World's ideas of government and law. Selections from Tacitus' *Annals* are read as

a contrast because of their studied depiction of human excess in tyranny and degradation. In the Winter Term, Roman comedy treats students to the bases of European high comedy and farce. In the Spring Term, the students begin to understand the Roman concepts of moderation versus excess through the writings of the poet Horace, described by a twentieth-century psychiatrist as "a type of the perfectly integrated personality." The lyric poetry of Catullus reveals the perennial personal emotions found as well in the First Century BC as now.

CLASSICS COURSES

21—1 Classical Civilization: Greece

(5321) Four prepared class periods. For Juniors and

21—3 Lower Middlers. The course surveys the

(5323) achievements of the ancient Greeks from Homeric times through Alexander the Great, including their impact on later civilizations in such areas as literature, art, philosophy, drama, government and science.

22—2 Classical Civilization: Rome

(5332) Four prepared class periods. For Juniors and Lower Middlers. The course introduces students to the civilization of Rome which dominated the Western World politically for a thousand years and culturally for even longer. The developing concepts of politics, law, and empire as we know them today are discussed. The course challenges the students to consider the meaning of the Roman experience in its glorious achievement of the "Roman Peace" as well as in its "Decline and Fall."

For other courses related to Classics, please see: Under History: **Ancient History (History 330)**; Under Interdisciplinary: **Mythology; Etymology; Greek Literature in Translation.**

English

The diploma requirements in English are to establish competence in writing and reading (normally by successful completion of the *Competence Course*), and to complete the *Literature Sequence* through *Literature C*. For those entering Seniors and Post-Graduates who must take *English 300*, the requirement is reduced by the appropriate number of

trimesters. (Seniors and Post-Graduates are interviewed by the Department Chairman before the start of school and in some cases these students may be exempted from *English 300* to enroll in one of the 400 or 500 level English courses.) All new Lowers and Uppers enroll in *Competence*. Students entering the Junior Class must take the *English 10*. Juniors may not enroll in *Competence*.

The English Department also offers specialized courses for students who have already passed their competence and literature requirements and elect to continue studying English. Related courses, whose prerequisites vary, are listed elsewhere in this booklet: e.g., under Performing Arts, Interdisciplinary Courses, Classics Courses, and Modern Foreign Language Courses in translation. *All English courses meet for four prepared classes a week, unless the course description states otherwise.*

10—0 English

(1100) This course is required for all Juniors. As a foundation for the *Literature Sequence*, the course studies a variety of literary forms and styles. Frequent writing assignments, close reading of such texts as *The Odyssey*, *Great Expectations*, *Black Boy*, *The Tempest* and regular work with journal entries prepare the student for the *Competence* course in the tenth grade.

Juniors are also eligible to enroll in Etymology, which is described under Interdisciplinary.

Normal Required Sequence (2 years) (For Lowers and entering Uppers only)

	Fall	Winter	Spring
First year of sequence	Competence		
Second year	Lit B (T2)	Lit C	

(1200) Competence Course

The course is designed to teach basic skills in reading and writing. It enables a student to achieve the competence requisite for the literature sequence and the specialized courses. The course is concerned with the recognition and use of the basic elements of a sentence, sentence patterns, punctuation, paragraph development and coherence, and the composition of unified exposition. The first term emphasizes writing paragraphs and short compositions; the second term includes multi-paragraph compositions and the documented report.

The third term focuses on close and accurate reading of the short story and the poem and helps students develop the skill necessary to write about these works clearly and concisely. *Competence* also encourages the acquisition of important reading skills in conjunction with the study of writing. Passages composed by skillful writers are evaluated for organization, logic, point of view, tone, diction, transitional devices. Through the use of the summary sentence, the outline, and the summary paragraph, a student learns to reduce a passage to core ideas. Texts: *English Competence Handbook*; *Writing: What's the Point*; *Combinations for Competence*; *The Modern Tradition*, ed. Howard; *The Norton Anthology of Poetry*.

LITERATURE SEQUENCE

Lit B (T2) (a two-term commitment)

Lit B continues the shift in emphasis, begun in the third term of *Competence*, away from basic writing training to reading and writing about literature. Here students will choose a course centered in one of three modes: Satiric, Tragic, or Mythic. Though the modes differ, the objectives of *Lit B* are common to all three: to develop the skills of literary analysis; to teach a sense of literary mode; to develop a sense of historical perspective; to teach the forms of the novel, the poem, the play; to develop a literary sensibility; and to apply analytical skills to the writing of papers.

(1224) Lit B—I (The Satiric View)

A study of verse and prose works that illustrate the nature, purposes, and techniques of satiric writings. Core Texts:

FALL TERM — *Huckleberry Finn*

Gulliver's Travels

Satire: From Aesop to Buchwald

WINTER TERM— *Nineteen Eighty-four*

Canterbury Tales

Poetry from Satire: From Aesop to Buchwald

The Best of Simple

(1234) Lit B—II (The Tragic View)

This course examines the form and content of a number of works in order to identify and define elements of tragedy that are fundamental to them. The works are arranged in approximate chronological order with a balance being sought in each term among the various genres. Techniques of literary analysis and critical

appraisals of the reading are stressed in frequent written assignments. Core Texts:

FALL TERM — *Oedipus Rex*

Wuthering Heights

Selected poetry

Selected plays by Ibsen

WINTER TERM—A novel by Thomas Hardy

Heart of Darkness

A work by Toni Morrison

Selected poetry

(1244) **Lit B—III (The Mythic View)**

The course explores mythic elements in a wide variety of works with the aim of developing a student's ability to respond to and write about literature.

Core Texts:

FALL TERM — *The Bible* (selections)

The Oedipus Cycle

Heart of Darkness

Song of Solomon

Grimms' Fairy Tales

Selected poetry

WINTER TERM—*Moby Dick*

Huckleberry Finn

Selected poetry

(1263) **Lit C**

An introduction to the study of Shakespeare. At least three plays will be read, one being *Hamlet*, with an emphasis upon close textual analysis.

SPECIALIZED COURSES

Specialized Courses are open to students who have successfully completed *Competence, Literature B* and *C*. Courses numbered in the 500s are more intensive and demanding than those numbered in the 300s and 400s. Each course has four prepared class periods a week, unless specifically stated otherwise. Only courses with sufficient enrollment will be given.

300—12 English

(1301) A special course for all Post-Graduates and

(1302) one-year Seniors. Its purpose is to provide the writing and reading skills taught in *Com-*

petence as well as to expose students to substantial works of literature. While reading plays, poetry, short stories, or novels, students undertake intensive writing exercises and learn to write effective papers of greater length. (Mr. Miller, Mr. Smith, Mr. McGraw)

401—123 Non-Fiction Writing

(1711)

(1712) In this course writers will gain practice in

(1713) these non-fiction modes: personal essay,

analysis, argument, feature writing, and extended composition. There are daily writing assignments; class work focuses on student editing. The instructors assume that students entering the course write with grammatical and rhetorical competence. Students are encouraged to submit their work for publication in newspapers and magazines. (Mr. Gould)

403—123 Introduction to Writing

(1731)

(1732) An introductory course to the writing of

(1733) original stories, informal essays, and poetry.

While examining examples of the genres mentioned, the student tries all these forms.

With written permission from the Department Chairman, a student may take this course before he has completed the normal Competence-Literature sequence. (Mr. Owen)

405—123 Afro-American and Native American History and Literature

(1751)

(1752) A survey of Afro-Americans' and Native

(1753) Americans' experience and their literary response to it. Each student will complete a

project that will span her or his enrollment in the course. These projects may be comparative analyses of the Afro-American or Native American experience with that of another racial or ethnic group. (Ms. Moss)

407—123 British Writers

(1771)

(1772) Through a selection of British poems, plays,

(1773) and novels spanning several centuries, stu-

dents will become acquainted with important themes and techniques of the great English literary tradition. Representative authors include Chaucer, Spenser, Milton, Pope, Fielding, Johnson, Wordsworth, Austin, Keats, the Brontes, Dickens, Tennyson, Hardy, Lawrence, Joyce, Woolfe and Green. (Ms. Thomas, Ms. Fan, Mr. Gilbert, Mr. Thorn, Mr. Wilkin)

408—123 American Writers

(1781)

(1782) A thematic and comparative study of the

(1783) novel, drama, and poetry in America from

1850 to the present. Representative authors are Hawthorne, James, Wolfe, O'Neill, Fitzgerald, Dos Passos, Hemingway, Williams, Faulkner, West, Styron, Agee, Cather, Wharton, Whitman, Frost, Cummings. (Mr. Cobb, Mr. Bardo, Ms. Moss, Mr. Price, Mr. Smith)

500—23 James Joyce

(1802) The first term is devoted to *Dubliners*, *A Portrait of the Artist*, and *Stephen Hero*, and Ellmann's *James Joyce*; the second to *Ulysses* and *Finnegans Wake* in part. The purpose of the course is to follow the development of Joyce's method and style and to develop the skill to read important and difficult works without the aid of study guides and other secondary material beyond the Ellmann. Although the course may be taken in either term, the student gains a better sense of Joyce's genius by enrolling for two terms. (Dr. Germain)

502—12 Irish Literature

(1821) The course will begin with a brief examination of Irish history and Celtic mythology in order to broaden our appreciation and understanding of the four major writers of the Irish Renaissance: Yeats, Joyce, Synge, and O'Casey. Throughout the term we will try to draw connections between Irish politics and literature, both during the Literary Revival and today, in Northern Ireland, where "the troubles" persist. (Mrs. Stephens)

504—123 Man and God

(1841) The course considers man's search for meaning in what frequently seems to be an inexplicable world. Readings include: *King Lear*, Shakespeare; *As I Lay Dying*, Faulkner; *Long Day's Journey into Night*, O'Neill; *The Plague*, Camus; *The Fixer*, Malamud; *Crime and Punishment*, Dostoevski; *The Trial*, Kafka; *Wise Blood*, O'Connor; *Nine Stories*, Salinger; *The Birthday Party*, Pinter; *Alice in Wonderland*, Carroll; *Zorba the Greek*, Kazantzakis; *The Bluest Eye*, Morrison. (Miss St. Pierre)

508—23 Directions in 20th Century Drama

(1882) The close study of significant contemporary drama. The Winter Term focuses on the first half of the 20th century and plays by Shaw, Chekov, Strindberg, O'Casey, Brecht, Pirandello, and Ionesco are read. The Spring Term starts with Beckett, and includes plays by Williams, Bolt, Pinter, Albee, Stoppard, and Shepard. (Ms. Braverman, Mr. Owen)

509—1 Shakespeare: The Man, The Times, The Theatre, The Plays

(1891) The course focuses on six plays (representative histories, tragedies, and comedies), and the sonnets, as well as some biographical and historical readings. (Mr. Stephens)

510—123 The Short Novel

(1901) An examination of the novella, and the genre of the short story with concentration on some fifteen works of comparative literature, including, Chekov's *Ward No. 6*; Mann's *Death In Venice*; Lawrence's *The Fox*; Tolstoy's *The Kreutzer Sonata*; James' *The Beast in the Jungle*; Stendhal's *The Cenci*; Greene's *The Third Man*; Melville's *Billy Budd*; Stevenson's *Dr. Jekyll and Mr. Hyde*. (Mr. Peffer, Mr. Gilbert)

512—123 Satire and Comedy

(1921) A study of both the theories and practice of satire and comedy, with emphases on the eighteenth century and the modern period. Works by authors like Pope, Swift, Sterne, Ben Jonson, Waugh, and Heller will be studied in conjunction with the visual art of Hogarth and Steinberg, and recordings of modern performers like Peter Cook, Mel Brooks, and Peter Sellers. (Mr. Regan)

513—123 Novel & Drama Seminar

(1931) The course concentrates on major works of literature since 1880, primarily on the works of Virginia Woolf, Henry James, David Storey, Franz Kafka, Flannery O'Connor, T.S. Eliot, Samuel Beckett, Eugene O'Neill, William Faulkner, Gunter Grass, Saul Bellow, Gabriel Garcia Marquez, Grace Paley, John Barth, Isaac Bashevis Singer, Robert Stone, Elie Weisel, Harold Pinter, Bertolt Brecht, and Vladimir Nabokov. Students study the "world" of each writer and compare it with that of the others. As a basis for the comparison with the classics of the past, they also study a Greek Tragedy and *The Brothers Karamazov*. Class periods are devoted to seminar discussions (often led by students) and critiques of student writing. Students regularly stage dramatic readings, cast and performed by the class. (Mr. Wise)

514—123 Creative Writing

(1941) A writing course in poetry and short fiction and the personal essay. Students may be asked to keep journals or to do short reading assignments, but the primary emphasis is on the body of work the student creates during the term. Content varies from term to term according to the instructor. (Ms. Gibson, Mr. McKain, Mr. Gould)

515—123 Literature of the Quest

(1951) Focusing on the ancient pattern of the journey, the thresholds crossed and the vision obtained, the course asks students to interpret elements of the quest from a variety of perspectives. In the Fall Term readings include Socrates'

Euthyphro and *Oedipus Rex*, the Abraham cycle, Beckett's *Waiting for Godot*, and Eliot's *The Waste Land*. The Winter Term considers the suffering encountered on the quest and explores themes from the gospel of Mark, *King Lear*, *The Great Gatsby*, Wiesel's *Night*, West's *Miss Lonelyhearts* and Flannery O'Connor's *Everything That Rises Must Converge*. The Spring Term questions the journey's end, reading the Amor and Psyche myth and *Alice in Wonderland*, comparing Jacob and Jesus and ending with two tragicomedies: *The Tempest* and *Who's Afraid of Virginia Woolf?* (Mr. Zaeder)

518—1 Spenser and Milton

(1961) Students read minor works of both authors as well as Spenser's *The Faerie Queene* (Books I-II) and Milton's *Paradise Lost*. (Mr. Kalkstein)

520—123 Images of Woman

(1971) This course will examine, through the study of literature, woman as she perceives herself and as she is perceived by others. It will explore works by both men and women writers and will focus on the constant and the changing image of woman in different literary periods. Readings will include: *Northanger Abbey*, Austen; *Jane Eyre*, Bronte; *Hedda Gabler*, Ibsen; *Measure for Measure*, Shakespeare; *The French Lieutenant's Woman*, Fowles; *The Awakening*, Chopin; *The Mill on the Floss*, Eliot; *The Scarlet Letter*, Hawthorne; *Surfacing*, Atwood; *A Room of One's Own*, Woolf; *Diving Into The Wreck*, Rich; *Song of Solomon*, Morrison; *Tell Me a Riddle*, Olsen; *As I Lay Dying*, Faulkner. (Ms. Harper, Ms. DeJong)

527—3 Chaucer and His Age

(1983) The sophisticated ingenuousness of the Middle Ages as seen in works by two of its greatest practitioners, Chaucer and the *Gawain*-poet. The focus of the course is a study of *The Canterbury Tales* in Middle English. *Sir Gawain and the Green Knight* will be read in translation. (Mr. Wilkin)

528—2 Wit and Poetry in the Seventeenth Century

(1992) A study of the several types of concentrated, witty poetry that dominated the early seventeenth century—the work of Donne, Jonson, Herbert, and Marvell—and of the profound effect that these poets have had on later poets like Hopkins and Eliot. Although the focus of the course is poetry, some of the background material is prose, from Elizabethan sources to the modern literary critics. (Mr. Zaeder)

The following Theatre courses, which are related to English studies, have no prerequisites: **Theatre 22 (Public Speaking)**, **Theatre 28 (Shakespearean Workshop)**, and **Theatre 53 (Playwriting)**. Other courses related to English are **Art 311 (Contemporary Communications)** and, in the Interdisciplinary section, literature in translation courses and **Basic Study Skills**, **Language Skills I & II**, and **Efficient Reading Skills**.

History and the Social Sciences

To satisfy the Department's diploma requirement in 1985-86, the student must successfully complete four terms of history during the 11th and 12th grades. Normally the requirement is satisfied by taking three terms of United States History (*History 300-T2* and *301*) plus a fourth trimester of a 300-level elective survey beyond *History 301*. This elective-survey requirement encourages students to study non-United States history and social science.

For students so assigned because of their HQT scores (see #2 below), *History 250* counts as the fourth term of the diploma requirement.

Seminars at the 400-level are primarily for Seniors who have already completed their 4-term diploma requirement. However, a 400-seminar may count as the 4th-term requirement if the student has passed two terms of non-United States history or social science during the Junior or Lower years at Phillips Academy (or the equivalent in the 9th or 10th grades at another school) and has scored sufficiently well on the History Qualifying Test.

The History Qualifying Test (HQT) is given to all Lowers during the Spring Term and then to all new Uppers, Seniors, Post-Graduates, and foreign students during the orientation period in September. The purpose of the test is to place students in the appropriate level of history study:

1) For many, the HQT indicates that the student should begin the 3-term U.S. History sequence (*300 (T2)*, *301*) in September 1985. Students may, however, wait to begin the *History 300* sequence a term later (in the Winter of 1986) or a year later (in

September of 1986). All these students are reminded that they may elect the fourth term of the requirement only after they have completed one term of the regular *History 300* sequence.

2) For some, the HQT indicates that the student should begin the diploma sequence by first taking *History 250* (either in the Fall of 1985 or the Spring of 1986), and then complete the 4-term requirement by taking the regular 3-term U.S. History sequence (300 (T2) and 301).

3) Finally, for students who have already had a yearlong U.S. History course in the 11th or 12th grade at their previous school, the HQT indicates whether they should take a term of *History 250*, a 300-elective survey, or a 400-seminar to complete the 4-term diploma requirement. Actual placement depends on the individual's previous non-United States history courses, the HQT score, and the judgment of the Department Chairman.

There are no required History or Social Science courses at the Junior or Lower Middle levels, but the History Department *strongly recommends* that Juniors take *History 110* (*Continuity and Change: An Introduction*). Juniors who take *History 110* may continue the study of *Continuity and Change* by electing *History 120* and/or *History 130*.

The History Department *recommends* that Lowers take one or more terms of biographical study. Students may select from *History 200* (*European*) and *220* (*American*). Although none of these courses counts as the fourth term of the diploma requirement, they are open to Uppers who have delayed taking the regular 4-term diploma sequence. *Reminder*: taking a combination of two or more terms of non-U.S. History as a Junior or Lower will allow a student to move directly from *U.S. History* to a 400-seminar as a Senior.

Washington Intern Program

The Department co-sponsors, with the Phillips Exeter Academy History Department, a special Spring Trimester (mid-March through late May) Program in Washington for Seniors taking, or who have taken, *History 300-301*, and for Uppers enrolled in *History 300-301*. The program is restricted to 15 Andover students and 15 Exeter students, competitively selected, for work as Interns in the

offices of Senators and Representatives. The application process begins early in the previous Fall Trimester. Prospective applicants should avoid taking 0-year-long courses.

INTRODUCTORY HISTORY COURSES

110—1 Continuity and Change: An Introduction

(2011) Five prepared class periods. Primarily for Juniors. An introduction to the study of history and the social sciences, this course will focus on the phenomenon of change in history: why, how, and when change occurs, and the ways in which people react to and

are affected by it. To accomplish this, three topics will be examined: the San Bushmen of the Kalahari Desert, the Black Death and Hiroshima, and the Chinese Revolution of 1911. One period per week will be devoted to discussion of contemporary issues.

120—2 Continuity and Change: The Pre-Modern World

(2032) Five prepared class periods. Primarily for Juniors. **Prerequisite:** *History 110*. This course will continue the theme of *History 110*, with an examination of further changes, taken from the world of Islam and the Christian Reformation. One period per week will be devoted to discussion of contemporary issues.

130—3 Continuity and Change: The Modern World

(2053) Five prepared class periods. Primarily for Juniors. **Prerequisite:** *History 110*. The final course in this series continues the study of historical changes with a focus on the last two centuries: topics such as the growth of industrialism, using as evidence the textile industry in the local Merrimack Valley, and Darwin and the theory of evolution. One period per week will be devoted to discussion of contemporary issues.

200—23 European Biography

(2102) Four prepared class periods. Open to Lowers and selected Juniors. These courses study the lives of men and women who made significant contributions in several fields of endeavor. Biographies are read in the effort to identify personality traits of important leaders and the circumstances which challenged and motivated them. The Winter Term deals with lives of men and women in Europe and Asia from the Middle Ages to the eighteenth

century. The Spring Term examines figures — such as Gandhi and Lenin — from the 19th and early 20th centuries. Although the Spring Term's study follows logically from the Winter, either term may be taken alone.

220—1 American Biography

(2121) Four prepared class periods. For Lowers and a limited number of Juniors. A comparative study of American leaders, the biography course examines the qualities of leadership, psychological explanations, and biographers' methodologies. Course materials include: *The Autobiography of Frederick Lewis Douglass* and Monica Sone's *Nisei Daughter*.

UNITED STATES HISTORY REQUIRED SEQUENCES

250—1 American Biography for Uppers

(2151) Four prepared class periods. For Uppers

250—3 whose HQT scores require a term of preliminary history study prior to *History 300 (T2)* and *301*. The primary difference between

History 250 and the other biography courses is that the readings here are geared to older students and the subject matter is more explicitly related to preparation for the *History 300* sequence. Course materials include: Padover's *Jefferson*; Remini's *Andrew Jackson*; and Oates' *The Fires of Jubilee: Nat Turner's Fierce Rebellion*.

300—12 The United States (T2) (a two-term commitment)

300—23 Four prepared class periods. For Upper Middlers and Seniors. This course, along with *History 301* and a fourth term (either

History 250, a 300-elective survey, or a 400-level seminar, depending on placement) fulfills the four-term history diploma requirement. The first term emphasizes three goals: a survey knowledge of American history through Reconstruction by reading an advanced-level text; the acquisition of skills by daily exercises in reading, note-taking, and writing; and an in-depth study of American federalism through focused readings and writing. The second term emphasizes American industrialization from the post Civil War years to 1940. The three goals of the first term continue — a survey knowledge, skills, and analytical mastery of an organizing theme — but the variety of readings and writings and the complexity of the materials increase.

301—1 The United States

(2211) Four prepared class periods. For Upper

301—3 Middlers and Seniors. The focus is on twentieth century America to the present, with

(2213) an emphasis on American foreign policy. In

this term the writing of a research paper represents a major part of the work. **Prerequisite:** successful completion of *History 300 (T2)*. In the Fall of 1985 the Washington Interns and Urban Studies participants of the Spring of 1985 will take *History 301-1*.

302—12 United States History for Foreign Students

(2221) Four prepared class periods. A course for

(2222) students for whom English is a second language and whose HQT scores indicate they

are not ready for *History 300 (T2)* and *301*. The course will emphasize language skills important to the study of American history and the subject matter will focus on the founding of the republic, constitution building and how the American government works, the westward movement, the Civil War and the coming of urban-industrial, multiethnic America. The intention of the course is to recognize the special needs of the students and to bring them to a level of achievement so they may transfer to the *300/301* sequence in the Winter or Spring Term, if the students wish to be candidates for the diploma. (Mrs. Lloyd)

ELECTIVE 300 — SURVEY COURSES

The following 300-level electives are *survey* introductions to non-United States areas of the world and to social science disciplines other than history. Any one of these 300-elective surveys counts as the fourth term of the diploma requirement. **Prerequisite:** A student must have completed at least one trimester of *History 300* or have credit for U.S. History from another school before enrolling in a 300-elective survey.

SURVEY COURSES IN THE SOCIAL SCIENCES

310—1 Introduction to Economics

(2811) Four prepared periods. For students who

310—2 have completed *History 300 (T2)* or the equivalent. The course aims to introduce Seniors to the basic principles of economics

and their application and relevance to current public policy issues. Students examine the development of the economies of the U.S. and the world, and are introduced

to basic theoretical tools which help them analyze important economic issues. Classes will consist primarily of discussions, although there will also be some role-playing exercises, class assignments, debates, guest speakers, films and student reports on their term projects. (Ms. Amster, Dr. Strudwick, Mr. Williams)

315—3 History and Mathematics

(2833) Four prepared periods. **Prerequisite:** permission of the Instructor. This course provides an introduction to the ways in which mathematics and statistics are employed in the study of history. Attention focuses on three main areas: elementary statistics and data analysis; entertaining historical controversies; and the logic of historical inquiry. To accomplish these purposes, participants do assigned homework problems in mathematics and applied statistics, read exemplary works in the field of quantitative history, and complete a history research project. (Dr. Strudwick)

325—3 Urban Studies Institute

(2843) Seniors and qualified Uppers who are not involved in yearlong courses may elect for their entire Spring course program to participate in a ten-week exploration of the American city, including field work six hours each week. Lawrence, Massachusetts, its history and its present shape, its people and their special problems and opportunities, will be the focus of study, but the context will be drawn through investigation of broad historical, social, and economic issues which affect most of urban America. Lawrence has always been an immigrant city, and one-third of Lawrence's public school students are now of Hispanic background. In addition to their academic course work, students will explore a central aspect of urban life by serving as tutors in an intensive English language training program for a group of these Lawrence children; the tutoring program, which will be designed by Institute students and staff, will use dramatization and one-to-one tutoring to strengthen the children's oral and literary skills. Knowledge of Spanish or familiarity with theatre will be useful, but not essential.

All students will take a course in Caribbean History and a course in Urban History, as well as a core course introducing developmental psychology and ethnic studies in such a way as to inform and support the fieldwork project. Students will meet periodically in evening seminars with outside speakers.

Seven to ten Phillips Academy students will be selected by interview and special application. Seven to ten students from college preparatory courses in Lawrence and Andover high schools will be selected in the same way. Apply to Susan M. Lloyd by December 1, 1985, for

information and application forms. In the Fall of 1986 members of the Class of 1987 who took Urban Studies the previous Spring, and who have taken *History 300* (T2), but not 301, will take 301. (Mrs. Lloyd, Mr. Mozo, Mr. Quattlebaum)

SURVEY COURSES IN HISTORY

330—123 Ancient History

(2301) Four prepared class periods. For Upper
(2302) Middlers and Seniors. The course is concerned with Greek and Roman history from the Minoan Period to the beginning of the Medieval Period. Each term represents a coherent and independent unit. In the Fall Term the survey ends with the world empire of Alexander the Great. The Winter Term covers the period from the beginning of Rome until its transition from Republic to Empire. The Spring Term is concerned with Roman Empire and the transition from Roman to Medieval History. (Mr. Krumpke)

332—1 Social History of the Middle Ages

(2321) Four prepared class periods. For Upper Middlers and Seniors. The course starts with the reshaping of Roman laws and customs by the rapidly emerging Christian doctrine; these in turn are changed by the invasions of the Germanic peoples. Charlemagne serves as the prime illustration of this medieval combination of attitudes. As Europe moved toward the Renaissance, humanism and rationalism dignified woman as the 'Lady' of courtly love; at the same time the fear of woman as the 'witch' haunted Europe. (Mrs. Clark)

334—123 Modern Europe: A Survey

(2341) Four prepared class periods. Open to Upper
(2342) Middlers and Seniors. The Fall Term consists of a background survey of the 16th, 17th, and 18th centuries, with particular emphasis on the political, economic, and intellectual revolutions that helped to mold the modern world. The focus of the Winter Term is the period 1800-1900, with continuing attention given to the shaping of modern thought, the emergence of the nation-state, and the effects of industrialism. In the Spring Term, the course covers topics in 20th century Europe; the two World Wars, and their effect; the nature of totalitarianism; the cold war and the rise of the superpowers. Reading is from primary and secondary sources, as well as fiction. Visual materials are used where appropriate. The full year course has proven to be a good preparation for the Advanced Placement Examination in European History. (Mr. Royce)

336 Tudor England (Not offered in 1985-86.)

337—1 Victorian England: England in an Age of Expansion
(2371)

337—2 Four prepared periods. For Uppers and Seniors. The course is devoted to a study of the major transitions and developments of nineteenth century Britain. It is divided into three central components: economic and social developments; political movements; and international relations. Since Victorian literature more directly reflects the life and thought of the times than that of any other period of English history, the course includes an examination of those writers whose works were influential in either adapting or describing the minds and institutions of the English people to the changing conditions of the period. These writers include Hardy, Dickens and Marx. (Ms. Minard, Dr. Strudwick)

338—123 The Russian Experience

(2381) This course, primarily for Seniors, but open

(2382) to Uppers with the Instructors' permission,

(2383) is a survey of Russian history, literature and culture from medieval times to the present.

In the Fall Term, the focus is on the development of ideas and institutions in Old Russia and the Imperial period, through much of the 19th century. In the Winter, the subject is Russia in Revolution, covering the period 1880-1940, and in the Spring attention is given to the Soviet Union since World War II. While any of these terms may be taken alone, the course is taught as a unified whole, with the second and third terms building on the previous ones to develop the key themes in Russia's past and in particular to address the question of why Russian society has never developed the kind of democratic institutions with which we are familiar. Considerable attention is given to the study of literature. The course examines the significant events and ideas of the Russian past and the reflection of these events and ideas in the fiction and memoirs of authors such as Pushkin, Gogol, Turgenyev, Dostoevsky, Tolstoy, Chekhov, Gorky, Mayakovsky, Blok, Zamiatin, Babel, Mandelstam, Bulgakov, Solzhenitsyn and Aksyonov. (Mrs. Powell and Mr. Richards)

See also Russian 13 in the Modern Foreign Language section.

340—13 Modern China

(2401) Four prepared class periods. For Upper

(2403) Middlers and Seniors. After an introduction to traditional Chinese thought and institutions, the course will concentrate on events since 1800 in China. There will be much emphasis on China's re-

sponse to the West, on economic, intellectual and political developments during the nineteenth and twentieth centuries. The emphasis will be on political developments in the Fall, and on art, literature and philosophy in the Spring. The classes will include both lecture and discussion.

342—2 Modern Japan

(2422) Four prepared class periods. For Upper

Middlers and Seniors. After an introduction to traditional thought and feudal social structure in Japan, the course will move to a closer look at ideas, events and developments since 1800. An attempt will be made to understand the unique way in which Japan responded to the challenge of the West. Readings will be in historical texts, impressions of contemporary observers, sociological descriptions and literature, with a special effort to understand the outstanding features of Japanese culture, politics and economics through analysis and discussion.

344—3 Africa and the World

(2443) This course will focus on contemporary issues facing the new nations of Africa, based

on an historical analysis of the emergence of Africa from the colonial period. Political and economic development of these countries, the relations between developed and developing states, the emergence of majority rule in Southern Africa, and the role of Africa in the United Nations will be studied. Readings will include analyses of the issues African nations confront in the modern world, novels about Africa, and speeches and articles by African statesmen. (Mr. McNemar)

346—1 The Middle East

(2461) Four prepared class periods. For Upper

Middlers and Seniors. Few if any regions of the world claim a more compelling interest than the Middle East. From its ancient site of half the earth's cultural antecedents, birthplace of three world religions, landbridge of three continents, eternal East-West corridor, and ceaseless crossroads of conquerors, pilgrims, and tradesmen, the Middle East derives a distinctive character of its own. This course traces the region's history from the advent and spread of Islam through the Ottoman and Safavid empires to western imperialism and the present situation. (Mr. Bunnell)

348—12 Latin American Studies

(2481) Four prepared class periods. For Upper

(2482) Middlers and Seniors. The History and Spanish Departments offer this interdisciplinary course to provide an analysis of social and politi-

cal structures through the study of their historical and cultural development. The course will give special attention to current developments and United States policies towards these countries. The Fall focuses on Mexico; the Winter, on Central America; and the Spring, on the Caribbean. (The Spring is reserved for students in the Urban Studies Institute.) (Mr. Mozo)

ELECTIVE 400 — SEMINAR COURSES

These 400-level electives are *seminars* for Seniors. Issue-oriented trimester courses, they meet three hours a week, with an expectation of substantial independent reading and writing. For effective discussion, they are limited to 12 students. **Prerequisite:** either (1) prior completion of the 4-term diploma requirement; or (2) completion of the 3-term U.S. History sequence (300 (T2) and 301) *plus* two trimesters of non-U.S. History in the 9th or 10th grades *and* a high score on the HQT. Occasionally a senior may want to take a 400-seminar prior to satisfying the diploma requirement of an elective 300-survey; such exceptions must be approved by the Department Chairman.

SEMINARS IN SOCIAL SCIENCES

410 The Modern American Presidency (Not offered in 1985-86.)

415—2 American Race Relations

(2932)

This seminar investigates the development of racial thoughts and feelings in the United States, and shows how such attitudes have taken social and legal form. We begin with a brief search for the origins of colonial racism, and then contrast patterns of antebellum slavery in the South with antislavery movements and antiblack restrictions in the North. After an examination of the role of blacks during the nation's civil war and reconstruction, we consider the causes and consequences of nativist moves to disfranchise and ostracize blacks and other racial minorities in this century. Recent issues of civil and economic rights—how to reconcile assimilation with separation, Birmingham with Boston, *Brown* with *Bakke*, equality of opportunity with equality of result—receive substantial attention. (Mr. Williams)

425—1 International Relations: The Present Patterns

(2951)

425—3

(2953)

This is a seminar on the Cold War with emphasis upon the politics of the world's two superpowers, the United States and the Soviet Union: how they created the United Nations, the Cold War, the many alliances, the nuclear arms race, and the numerous confrontations between themselves and their respective allies; how, too, they prompted the formation of the Third World and repeatedly intervened in its affairs with financial aid, advice, arms, alignments and troops; and finally, some reasons why they continue to perpetuate these massive manifestations of their great power. Textbook and periodicals are employed. (Messrs. Bunnell, Gurry, McNemar)

430 Men, Women and American Culture (Not offered in 1985-86)

470—2 Nuclear Weapons — Proliferation and Responses

(2972)

This seminar follows the evolution of and reaction to The Bomb — from the discovery in 1938 of fission on Otto Hahn's table in Nazi Germany, to Hiroshima, the Cuban Missile Crisis of 1962, and the START Talks and cruise missiles and President Reagan's "Star Wars" speech in the 1980's. Historians, chemists, physicists, political scientists, and journalists are among those who tell the story, in lectures, documents, and secondary accounts. Readings include Richard Rhodes, *Ultimate Powers*; Martin J. Sherwin, *A World Destroyed*; Robert F. Kennedy, *Thirteen Days*; and Jonathan Schell, *The Abolition*. The course entails class discussion of the lectures and readings, a research project, and two exams (mid-term and final). (Mr. Quattlebaum)

SEMINARS IN HISTORY

450—3 A Social History of Families in America

(2653)

This seminar is based on the assumption that the social structure of American Society is dependent on the nature of the family. Family constitution has changed over time because of immigration, changing sex roles and mores, the creation of the concept of adolescence, and women's liberation among other reasons. This course will examine these developments as well as changing relationships between husbands and wives and parents and children from the colonial period to the present. Readings are drawn from primary and secondary sources. Students are asked to write a series of critical essays as well as the history of their family in America. (Ms. Amster, Dr. Taylor)

455—2 The Courts and Constitutional Development, 1935-1985
(2672)

The seminar focuses on the often conflicting rights of individuals and society as decided by the courts in the years 1935-85. What are the legal powers and limits of government to regulate the actions of individuals in the public interest? To what extent may government regulate private businesses relative to working conditions, consumer interests, or the environment? To what extent may the courts act to protect the rights of freedom of speech, press, assembly, and religion; rights against illegal search and seizure; rights of those accused of crimes; and equal rights to vote, education, employment, and housing opportunities regardless of race, religion or sex? The seminar examines the relationships between ethics and social values, political and economic developments, special interest groups, and the development of law. Students analyze the roles of lawyers and judges; legal procedures; the influence of special interests; and the arguments of prosecutors, plaintiffs, and defendants. The readings emphasize the case method by works such as Westin's *The Anatomy of a Constitutional Law Case*; Kutler's *The Supreme Court and the Constitution*; Lyons' *The Supreme Court and Individual Rights in Contemporary Society*; and, especially, Supreme Court decisions. The basic classroom procedure is Socratic dialogue, and the climax of each student's study is the critical analysis of a constitutional law case. (Mr. Lyons)

460 American Urban History
(Not offered in 1985-86.)

The following course is offered because the Academy's Archives are probably the best in American secondary education. Since the course is neither a "survey" -- 300 nor a "seminar" -- 400, the course does not count as one of the four trimester requirements for graduation. This tutorial-research opportunity is a unique offering in American secondary schools.

(2692) Topics in the History of Phillips Academy and Abbot Academy

The course involves work in the Phillips Academy and Abbot Academy Archives on some aspect of the history of the schools; the course introduces the student to the problems of working with the raw materials of history. Permission of the Instructor is required for enrollment. (Mrs. Quattlebaum)

Interdisciplinary

All courses are electives. Courses in this section may be taken during more than one trimester unless the individual description indicates to the contrary.

(9501) Basic Study Skills

(9502) Four class periods. Not open to Juniors in the Fall. The course is designed to help students build effective study skills through understanding more about the learning process. Class discussion focuses on the problems of motivation, concentration and retention. Exercises are designed to work on improvement in each of these areas and to develop proficiency in planning studying time, in developing accurate yet flexible reading comprehension, in taking notes or marking books, and in preparing for exams. This course may be taken for at most one term. **Prerequisite:** permission of the Instructor. (Mrs. Brother)

(9511) Efficient Reading Skills

(9513) Four class periods. Recommended for Upper Middlers and Seniors, this course is designed to teach strategies for increasing reading efficiency and comprehension. It places particular emphasis on techniques for reading textbooks and novels, vocabulary development, and the improvement of comprehension through analysis of assigned readings. This course may be taken for at most one term. (Ms. Brown)

(9522) Language Skills I

Four class periods. Open to Juniors and Lower. This course is designed for those students who need supplementary help in overcoming weaknesses in writing, spelling and vocabulary. Specific assignments are geared to the needs of each student. Open only to students who have permission of the Instructor. (Ms. Brown)

(9533) Language Skills II

Four class periods. Seniors and Uppers who need help in writing essays and research papers may elect this course for the Spring Term only. Organizational skills, paragraph and sentence structure, and theme development will be reviewed depending on students' individual needs. Students must have permission of the Instructor. (Mrs. Brother)

(9351) **Etymology**

(9352) Four prepared class periods. For all classes.

(9353) Training in the interpretation of English words by systematic analysis of elements derived from Greek, Latin and other Indo-European languages. Exercises expand vocabulary and develop precision of expression and understanding. The course may be taken for at most one term.

(9371) **Greek Literature in Translation**

(9372) Four prepared class periods. Open to all classes. A systematic study of the master-

pieces of early European civilization as seen in their proper literary, intellectual, and historical context. In what is essentially a history of ideas, the major genres of epic, tragedy, comedy, satire, history, erotic poetry, and philosophy are stressed as aspects of the wider evolution of early European thought which laid the basis for modern civilization. The major problems which still confront human life are explored through the writings of Homer, Aeschylus, Sophocles, Euripides, Herodotus, Thucydides, Aristophanes, Plato and others. This course may be taken for at most one term. (Dr. Pottle)

(9362) **Mythology**

(9363) The interest of the twentieth century in classical mythology has stemmed from three main sources: the psychoanalytical use of myth, progress in the field of classical archaeology, and anthropological study of myth. Preliminary exploration of the works of Freud in psychology, Schliemann and Evans in archaeology, and Frazer, Graves, and Levi-Strauss in anthropology leads to the detailed study of the myths of Oedipus, Theseus, and Agamemnon among others. The myths are considered living entities, changing in the hands of each artist who deals with them whether it be Homer or Joyce, Aeschylus or O'Neill, an anonymous Greek vase painter or Dali, Euripides or Strauss. Works of literature, art, and music provide the core for the study of the use of myth in human life. This course may be taken for at most one term. (Mr. Krumpe)

(9601) **Typing**

(9603) This course in personal typing is open to all students; it is designed for beginners to learn the keyboard and basic typing skills. There is no charge, but students must supply their own typewriters. This course does not earn academic credit. (Mrs. DiClemente)

For other courses which are interdisciplinary in nature, see Art 311 and RelPhil 46.

Mathematics

The mathematics curriculum is built around a core sequence of eight trimester courses: three of elementary algebra, two of geometry, one of intermediate algebra and two of precalculus topics. The completion of these eight trimesters will satisfy diploma requirements, but an additional trimester is required before entering the calculus. Placement of new students in the appropriate first course is made by the Department considering the record in previous schools, the results of a self-administered diagnostic test in elementary algebra which is sent to newly admitted students in the Spring, and the course program chosen by the entering student. In general, algebra courses taken before the eighth grade and geometry courses taken before the ninth grade will not earn placement credit. Examinations to validate first and second year algebra skills are given early in the Fall Trimester, at which time students who are incorrectly placed can be shifted to higher or lower level courses.

Students entering with no prior study of algebra start with *Mathematics 10*; those with a partial year of algebra enter *Mathematics 11*. Students entering with a full year of algebra start with *Mathematics 20-12*. If the results of placement testing indicate a need for *Algebra Review*, then students who have not taken geometry start with *Mathematics 19-1* and continue to *Mathematics 20-23*.

New students who have taken one year of elementary algebra and one year of geometry will satisfy diploma requirements by taking *Mathematics 32-1* and *35-23*. Those with a strong background in intermediate algebra may enroll directly in *Mathematics 35-12*. If, on the basis of our testing, the student's algebra skills are weak, then *Mathematics 25-0* may be required before precalculus.

It is generally best to take the College Entrance Examination Board Achievement Test (Level II) in Mathematics near the end of or immediately following *Mathematics 36*.

For students who wish to go beyond the required level, the Department offers many electives, some of which lead up to and beyond the Advanced Placement Calculus Examinations of the College Board. The prerequisites of these elective

courses should be noted, particularly by students who are involved in Off-Campus Programs.

Hand Calculators

Every student taking Mathematics or Physical Science must have a suitable hand calculator capable of handling square roots, sines, cosines, reciprocals, logarithms and exponents. Any calculator with *sin*, *log* and inverse function keys is adequate for all course use.

COURSES LEADING TO SATISFACTION OF THE DIPLOMA REQUIREMENT:

10—0 Elementary Algebra

(3100) Five prepared class periods. A yearlong course for students who have had little or no algebra. Stress is placed on an understanding of the elementary structure and language of the real number system, on the manipulative skills of simplifying expressions and solving first and second degree equations, and on the study and graphing of polynomial functions. Work is done with word problems, inequalities, irrational numbers, and right triangle trigonometry. **Prerequisite:** None.

11—0 Elementary Algebra

(3110) Five prepared class periods. A yearlong course for students who have had previous instruction in algebra but whose knowledge and skills are not strong enough to enter the regular second level course. The topics covered are the same as *Mathematics 10-0*. **Prerequisite:** A half to a full year of algebra.

19—1 Algebra Review

(3191) Five prepared class periods. A course for students who enter with a full year of algebra whose knowledge and confidence indicate they need a brief review of algebra. **Prerequisite:** A full year of algebra.

20—12 Geometry (T2) (a two-term commitment)

(3204) Five prepared class periods. A two-term course for students who have had a *strong* ninth grade algebra course, but no geometry. This course is a thorough and systematic

presentation of synthetic Euclidean geometry. Strong emphasis is placed on the need for precision and clarity in the writing of formal proofs. **Prerequisite:** A complete course in elementary algebra comparable in coverage to *Mathematics 10-0*.

25—0 Algebra Consolidation

(3250) Five prepared class periods. A course for new students entering Phillips Academy with one year of algebra and one year of geometry, whose algebra skills are not strong enough for placement in *Mathematics 32* or *35*. Comprehensive review of elementary algebra. Coordinate geometry. Introduction to algorithms and use of the computer. Extended problem solving. This course will normally be followed by *Mathematics 35-12*.

31—0 Geometry and Precalculus

(3310) Five prepared class periods. A yearlong course for entering students who have not studied geometry. The course covers Euclidean geometry (both synthetic and coordinate) and elementary functions (including polynomial, circular, exponential and logarithmic functions). **Prerequisite:** Credit for one year of elementary algebra and one year of intermediate algebra.

32—1 Intermediate Algebra

(3321) Five prepared class periods. Topics in intermediate algebra, including sets; properties of real numbers; factoring; fractions; exponents; radicals; absolute value; inequality; solutions of linear, quadratic, and radical equations. **Prerequisite:** *Mathematics 20*, or its equivalent.

35—12 Precalculus (T2) (a two-term commitment)

(3354) Five class periods, four prepared and one unprepared. More topics in intermediate algebra, including absolute value; inequality; linear, quadratic, polynomial, exponential, logarithmic, trigonometric, and inverse functions; graphing and applications of these functions. Completion of this course satisfies the diploma requirement. **Prerequisite:** *Mathematics 32*, or its equivalent.

40—12 Elementary Functions (T2) (a two-term commitment)

(3404) Five prepared class periods. A two-term course for entering Seniors whose prior work fails to satisfy diploma requirements. Work focuses on a review of the fundamentals of algebra, and the elementary functions. Students with high quality work in the Fall Trimester may satisfy the diploma requirements and take *Mathematics 50-23 (T2)*. **Prerequisite:** Credit for three years of high school mathematics.

ELECTIVE COURSES

Only courses with sufficient enrollment will be given.

36—1 Precalculus

- (3361) Five class periods, four prepared and one
36—3 unprepared. Required of students coming
(3363) from 35 (T2) who plan to study calculus.

Topics that bridge the gap between algebra and calculus, including exponential, logarithmic, circular and trigonometric functions. In the Fall Term, new Seniors who do poorly on in-class testing may be placed in the first term of 40(T2). **Prerequisite:** *Mathematics 35*, or its equivalent.

41—1 Probability

- (3411) Four prepared class periods. Includes sample spaces, counting problems, sampling,
41—2 conditional probability, random variables,
(3412) expected value, variance, standard deviation, binomial and normal distributions. The computer is used on applications that are too time-consuming to perform by hand and to simulate experiments for which there is no model. **Prerequisite:** *Mathematics 35*, or its equivalent.

42—2 Statistics

- (3422) Four prepared class periods. Applications of
42—3 various distributions, hypothesis testing,
(3423) statistical inference and data organization.
Prerequisite: *Mathematics 41*.

43—2 Problem Solving

- (3432) Four prepared class periods. A variety of non-routine problems drawn from some of the major ideas of precalculus mathematics, requiring various degrees of insight and creativity, will be considered. A synthesis of mathematical knowledge and methods will be the major goal of the course. For example, an inequality might be developed both algebraically and geometrically and then applied to problems in solid geometry, trigonometry and logarithms. **Prerequisite:** *Mathematics 35* (may be concurrent), or its equivalent.

50—23 Elementary Calculus (T2) (a two-term commitment)
(3505)

Four prepared periods. This course, for Seniors only, does not specifically prepare for the Advanced Placement Examination. The approach to calculus is concrete, informal and applied, as opposed to abstract, deductive, and theoretical. Topics include applications of the derivative and integral to problems of optimization, curve sketching, rate of change, area, volume, and work. Techniques will be developed to apply derivatives and integrals to logarithmic, exponential, trigonometric and inverse functions. **Prerequisite:** *Mathematics 36*, or an equivalent course in trigonometry and elementary functions.

51—1 Elementary Calculus

- (3511) Five prepared class periods. The first of a
51—3 three course sequence that covers the syllabus for the AB Advanced Placement Examination of the College Entrance Examination Board. Topics covered include: review of functions and graphing, theory of the definite integral, introduction to the derivative and its applications. **Prerequisite:** *Mathematics 36*, or its equivalent.

52—12 Elementary Calculus (T2) (a two-term commitment)
(3524)

- 52—23** Five prepared class periods. Course finishes the AB Advanced Placement Syllabus. Theory of the derivative, Chain Rule of differentiation, related rates, Rolle's Theorem, Mean Value Theorem, techniques and applications of integration, Fundamental Theorem of the Calculus. **Prerequisite:** *Mathematics 51*.

54—3 Infinite Series and Differential Equations

- (3543) Five prepared class periods. This course extends the work of *Mathematics 52* to prepare the student for the College Board BC Advanced Placement Examination. **Prerequisite:** *Mathematics 52*, or may be taken concurrently with 52 with departmental permission.

55—0 Honors Calculus

- (3550) Five prepared class periods. A yearlong course in analytic geometry and calculus which begins only in the Fall. Enrollment is limited to able and committed mathematics students, as the coverage is more theoretical and extensive than that of *Mathematics 51, 52*. Satisfactory completion of this course prepares for the College Board BC Advanced Placement Examination. **Prerequisite:** *Mathematics 36* or its equivalent, and departmental permission.

61—23 Calculus Continued (T2) (a two-term commitment)
(3615)

Four prepared class periods. The course completes preparation for the College Board BC Advanced Placement Examination, but may include additional topics at the discretion of the Instructor. Not open to students from *Mathematics 55* or others with satisfactory grades on the BC Advanced Placement Examination. **Prerequisite:** *Mathematics 52*, or its equivalent.

65—0 Calculus of Vector Functions

- (3650) Four prepared class periods. For students of demonstrated ability and interest. Vectors and the geometry of 3-space, functions of many variables, partial differentiation, multiple integration, line in-

tegrals, Green's Theorem, Stokes' Theorem, linear transformations and matrices. **Prerequisite:** *Mathematics 55* or permission of the Instructor.

68—123 Mathematics Seminar

(3681) A course for students who have finished
(3682) *Mathematics 65*. The topics studied will vary
(3683) according to the needs and interests of the students. **Prerequisite:** *Mathematics 65*, and permission of the Instructor.

COMPUTER COURSES

The Mathematics Department is located in Morse Hall, which also houses three computer rooms. One room has 11 timesharing terminals connected to a DEC minicomputer system. The other two rooms have microcomputers; one with 19 IBM Personal Computers and the other with 12 Apple computers and 1 Radio Shack computer. A variety of computer courses are offered that range from an introduction to computers to preparation for the Advanced Placement Examination in Computer Science. Computer languages taught include APL, LOGO, BASIC and Pascal.

Computer Discovering Algebra and the Computer

10—1 (Formerly *Math 17*)
(3801) Four prepared class periods. Designed to
10—2 complement the learning of elementary
(3802) algebra. Encourages experimentation and mathematical discovery and introduces such topics as graphing. No prior programming knowledge is required. A Programming Language (APL) will be used. **Prerequisite:** Concurrent enrollment in *Mathematics 10, 11, 19* or *20*.

Computer Computer Competence (LOGO) (Formerly Math 27)

20—1 Four prepared class periods. A one-term
(3821) course in *programming* in the LOGO lan-
20—2 guage for students with little or no pre-
(3822) vious experience with computers. The
20—3 course focuses on some of the important
(3823) applications of computers: graphics, word processing, and data management. Topics are introduced with commercial software packages. Then students design and program simplified versions of these packages. Design skills and user-friendly programming are stressed. This course does not qualify a student for

Computer 40 or *50*. **Prerequisite:** None. Not open to students from *Computer 30*.

Computer Beginning Computer (Pascal) (Formerly Math 47)

30—1 Four prepared class periods. An introduc-
(3861) tion to structured programming using the
30—2 Pascal language. Graphics will be empha-
(3862) sized in the first half of the course and the
30—3 manipulation of text and numbers in the
(3863) second half. The development of problem solving techniques and good programming style are the major objectives of the course. This course qualifies a student for *Computer 40* or *Computer 50*. **Prerequisite:** *Mathematics 20 (Geometry)*.

Computer Intermediate Computer (Pascal) (Formerly Math 49)

40—1 Four prepared class periods. For students
(3901) with programming experience in Pascal.
40—2 The course continues the practices and
(3902) disciplined approach to problem solving
40—3 introduced in *Computer 30*. Various stan-
(3903) dard algorithms such as searching and sorting will be introduced. **Prerequisite:** *Computer 30* or permission of the Department.

Computer Computer Science (Formerly Math 57)

50—1 Five prepared class periods. The first
(3951) term of a yearlong course in algorithms and data structures using primarily the Pascal language. The emphasis will be on programming methodology and some standard algorithms. The curriculum will be guided to a large extent by the Course Description of the College Board Advanced Placement Examination in Computer Science. **Prerequisite:** *Computer 30* or permission of the Department.

Computer Computer Science (T2) (a two-term commitment) (Formerly Math 57)

50—23 Five prepared class periods. Continuation
(3955) of *Computer 50-1*. The emphasis will be on data structures and larger programs. This course completes the preparation for the Advanced Placement Examination in Computer Science. **Prerequisite:** *Computer 50-1*.

SPECIAL COURSES

Mechanical Drawing 30, 31, and 32 are given at the same time in the same room by the same instruc-

tor, with the total number of students being limited by the number of work stations.

30—1 Mechanical Drawing (Elementary)

(3701) Two prepared class periods and four unpre-

pared. Not open to Juniors. A term-con-

tained beginning drawing course that in-

cludes the use of drawing instruments, lettering, geometric constructions and loci, sketching, orthographic projection, and spatial relations. Special stress is placed on a thorough mastery of fundamental concepts and skills.

31—1 Mechanical Drawing (Intermediate)

(3711) Two prepared class periods and four unpre-

pared. A term-contained technical drawing

course in applied Descriptive Geometry and

Graphics involving work in sectioning and

conventions, isometric and oblique pictorial

projections, intersections, primary auxiliary

views, and developments. *Prerequisite: Mechanical Drawing 30.*

32—2 Mechanical Drawing (Advanced)

(3722) Two prepared class periods and four unpre-

pared. A term-contained technical drawing

course consisting of substantial work in di-

mensioning, inking, detail and assembly en-

gineering drawing, print reading, perspective and/or fundamentals of design. *Prerequisite: Mechanical Drawing 31.*

30—1 Navigation (Coastal Piloting)

(3731) Four prepared class periods. Not open to Ju-

niors. A term-contained course in piloting;

i.e., marine navigation within sight of land

or landmarks. Substantial dead reckoning

and special case plotting is done on charts and small area plots. Aids and dangers to navigation are studied. Practical use is made of Tide and Current Tables, Light Lists, compass correction, and electronic aids.

31—3 Navigation (Celestial)

(3743) Four prepared class periods. A term-con-

tained course in celestial navigation: i.e.,

navigating at sea by means of the stars, sun, moon, and planets. Nautical astronomy is studied. Significant work is done in coordinate conversion, time, altitude intercept theory, the solution of the Navigational Triangle by HO 214, HO 229, and the Nautical Almanac, special lines of position, the use and correction of a marine sextant, times of observational twilight, and "a day's work" at sea. *Prerequisite: Navigation 30.*

Modern Foreign Languages

Andover's requirement of at least three high-school years of an ancient or modern language rests on the firm belief that direct acquaintance, through language, with the spirit and people of other lands is a psychological and intellectual resource of inestimable value for each individual, for every country, and for our common world.

The diploma requirement is satisfied by completion of three trimesters at the 30-level reached through the regular sequence, or by one trimester of 40-level reached through the accelerated sequence. Placement of new students is based on their previous school record, on the questionnaire sent to them and their current language teachers in the spring, and, when appropriate, on a personal interview with the language chairman at Andover. Details regarding various options and the diploma requirement as it is applicable to "incoming Uppers and Seniors who begin a new language at Andover" are available from the Registrar's Office.

With the exception of Italian (limited to Seniors), each of our languages, ancient and modern, may appropriately be started by students of any grade, Juniors (9th) through Seniors. Most Andover students continue their language study beyond the third year. Some study a second language in addition.

Small classes, flexible placement, and opportunities for acceleration assure that each student is in the optimum learning situation. The foreign language is the language of the classroom. In conversation, in reading, and in writing, the goal is direct communication in the foreign language rather than through translation. The classroom experience is expanded by the language laboratory; media resources (e.g., periodicals, radio broadcasts, movies); the staging of plays; club activities; language events and programs at Andover or nearby schools. At all levels of instruction attention is focused both on basic language skills and, increasingly, on the literature, history, and various art forms which reveal the people whose languages are being studied.

For information on School Year Abroad and other opportunities to study abroad, students should see their language instructor or the Chairman of the Language Division.

Chinese

Although the Chinese language may appear mysterious to Western eyes and ears, it is actually no more difficult than any other to speak. With no conjugations, verb tenses or declensions, there are some aspects which actually make it easier. To learn Chinese is to open a bridge to the Orient. Mandarin Chinese is the language of instruction. Emphasis in early courses is on listening and speaking skills. As more and more characters are assimilated the emphasis shifts to include reading and writing. Traditional texts are complemented by contemporary newspapers. Extensive use is made both of the language laboratory and of audio-visual material. Opportunity is available for qualified students to participate in our six-week study-travel summer exchange program in Harbin, China.

10—0 Beginning Chinese

(4410) Five prepared class periods. An introduction to modern spoken and written Chinese, stressing pronunciation and aural-oral facility, and including the reading and writing of characters.

10-20—0 Accelerated First and Second-Level Chinese

(4420) Five prepared class periods. Open to Seniors, and to Uppers with permission. An intensive yearlong course covering the essential material of both *Chinese 10* and *Chinese 20*.

20—0 Second-Level Chinese

(4440) Five prepared class periods. Emphasizes further development of aural-oral skills, making use of student-written dialogues and skits. Characters are introduced at a faster pace, and the basic text is supplemented by a character reader.

30—0 Third-Level Chinese

(4450) Five prepared class periods. More emphasis on reading comprehension, with discussion stemming from the readings. Basic text supplemented by graded readers on the lives of the philosophers Confucius and Mencius, the poets LiPo and TuFu, and the father of modern China, Sun-Yat-sen.

40-0 Fourth-Level Chinese (Not offered in 1985-86.)

Four prepared class periods. Readings, in both traditional and simplified characters, are selected to stimulate in-

terest in Chinese culture, ancient and modern. Topics in history, literature, and current events will serve as a basis for discussions and short compositions.

French

The French Department offers a six-year course of study. At all levels French is the language of the classroom, and in all courses the French language is taught in a cultural context. The first two years emphasize basic language structures. The third year serves as a transition to advanced courses which offer in-depth study of the literature and civilization of the French-speaking world. Students are encouraged to supplement classroom study with travel and study in France and other French-speaking countries through participation in programs such as School Year Abroad, the Antibes and Paris exchange programs, a class trip to Québec (*French 45-3*), and summer programs. Information on these programs may be obtained from the Modern Language Office.

10—0 Première année

(4010) First-year French for students who have had no previous courses in the language. Five prepared class periods. Listening comprehension and the use of basic conversation patterns of French speech are emphasized. Elementary grammatical and idiomatic structures are introduced as well as appropriate reading material. Students make frequent use of the language laboratory.

11—0 Premier niveau

(4030) First level French. Five prepared class periods. This course is designed for the student who has had previous instruction in the language, but whose knowledge and skills are not secure enough for entrance to a second-level section. It is also appropriate for students with experience in other languages who wish to begin the study of French. The course emphasizes the development of oral-aural skills and prepares for *French 21* the following year. Students who demonstrate unusual aptitude and interest are invited to enter *French 22*, the second-level accelerated course.

21—0 Deuxième niveau

(4060) Second level French. Five prepared class periods. For students who have completed

French 10 or French 11 and for new students who qualify through teacher recommendations or placement examination. While continuing to develop aural-oral skills, the course involves reading non-technical French prose and writing simple compositions.

22—0 Cours accéléré. Deuxième niveau

(4070) Accelerated second level French. Five prepared class periods. Upon successful completion of this course, students are recommended either for fourth level or for two trimesters of the third-level sequence to be followed by a single trimester fourth-level course.

Third-Level Courses

A two-trimester departmental Conversation and Composition course is followed by a trimester course which creates a transition to more specialized studies.

Conversation et Composition

Four prepared class periods. Students gain practice in conversation and composition in a course which stresses the development of all four basic language skills: listening, speaking, reading, writing. The focus of the course may be chosen between the following options.

30—12 Conversation et Composition: Réalités. (4094) (T2) (a two-term commitment)

Activities and discussions spring from authentic documents of everyday life, from tickets and schedules to magazine articles. Emphasis will be placed on writing for practical purposes.

31—12 Conversation et Composition: Fictions. (T2) (4104) (a two-term commitment)

Provocative short works of fiction are the starting points for discussions and for assignments in imaginative writing.

Cours spécialisé

Four prepared class periods. Each third trimester course involves learning about a particular subject in French, with language review supplied as needed. Whereas any one of the seven courses offered below could fulfill course objectives for all students, the Department prefers to offer variety, with the understanding that student choice can be accommodated only to the extent that overall enrollment permits.

32—3 Le village français

(4113) Using, as points of departure, the impressions and misimpressions which French and Americans have of each other's culture, this course attempts to give the student a better understanding of the French people and their institutions as reflected in the microcosm of a town. With the student's hometown as a basis of comparison, several French towns are examined in depth, including the provençal towns of Roussillon and Cassis and a town of the student's own choice. The basic text, Wylie, *Village en Vaucluse*, is complemented by readings, lectures, original documents, and both national and regional newspapers and magazine articles.

33—3 L'Histoire de la France jusqu'en 1875

(4123) This course concentrates on the main events and personalities from the reign of Louis XIII to the founding of Third Republic in 1875. The format combines lectures by the instructor, class discussions, slides, and film presentations. Readings from the text — *La civilisation française*, Marc Blancpain, Jean-Paul Couchoud — are supplemented by reading from two books on library reserve: *Histoire Géographie*, Lucien Pernet, Marcel Baleste; *Initiation à la culture française*, Hester, Parker, Griguat. (see French 43-1.)

34—3 Le roman

(4133) A particular novel is read and discussed during the term. (Novels selected in the past have included Sartre, *Les Jeux sont faits*, Camara Laye, *L'Enfant Noir*, Vercors, *Le Silence de la Mer*.)

36—3 Le cinéma

(4143) Usually two works of fiction are studied along with two films. The books and films for the course vary from year to year.

37—3 Le journalisme

(4153) Students study current examples of French journalism for discussion of contemporary issues, and for the better understanding of the nature of journalism and of the culture represented.

38—3 Contes

(4163) Francophone literature abounds in examples of the tale, from the fairy tales of Perrault and folk tales of various francophone countries to the satirical tales of Voltaire. This course will offer an overview of the genre, while concentrating on particular examples.

39—3 Le théâtre

(4173) An active participation course in which the student follows one play from the initial

reading through its final production, taking part in each of the four major phases: reading, analysis, production, performance. (Plays presented in the past have included Camus, *Le Malentendu*, and Ionesco, *La Cantatrice Chauve*.)

40-123 La civilisation française

(4191) Four prepared class periods. The course, (4192) consisting of three term-contained units, (4193) deals with aspects of French civilization as conveyed through various media. Students increase their practical vocabulary through discussion of texts, films, and videotapes.

41-2 Le monde francophone en dehors de l'Europe

(4202) Four prepared class periods. As an international colonial power France spread her culture throughout the world. The course studies the civilizations of West, Equatorial, and North (Arab) Africa as well as the French civilization of the Antilles (Haiti, Martinique, and Guadeloupe). In addition to geographical, social, and historical study, the course will include the following reading: J. Roumain, *Gouverneurs de la rosée*; Aimée Césaire, *La tragédie du roi Christophe*; F. Oyono, *Le vieux nègre et la médaille*.

42-0 Littérature française

(4210) Four prepared class periods. Emphasis is placed on class participation, vocabulary building, close analysis of major literary works, and learning to write about literature.

43-1 L'Histoire de la France depuis 1875

(4221) Four prepared class periods per week. The history of France from the founding of the Third Republic after the Franco-Prussian War to the current Fifth Republic. Lectures by the instructor, class discussions, written and oral reports by the students, slide and film presentations. Reading selections from: *La Troisième République 1870-1914*, Georges Bourgin; *La Troisième République 1914-1940*, Jacques Néré; *La France 1870-1970*, Christian et Arlette Ambrosi; *La IVe République*, Jacques Julliard; *Aujourd'hui 1945-1975*, Jean Mathieux et Gérard Vincent. (See French 33-3.)

44-1 Cours avancé de conversation et de phonétique

(4231) Four prepared class periods. Intended for students who understand, read and write French well and who already speak at a competent level, but who need further drill in conversational patterns and idiom-

atic expression. Diction, elocution, and intonation are also stressed through role-playing, speeches, and debates.

45-3 Québec et les Québécois

(4243) Four prepared class periods. Some amount of theory is balanced with observation and analysis of everyday life in Québec province to understand its political, economic, and social institutions, and such areas as religious, educational, and artistic life. Emphasis is on a close study of the media of Québec as well as personal involvement through liaison with Québec schools, students and newspapers, and through contact with French-speaking areas of Massachusetts and New Hampshire. The course may culminate in a trip to Québec.

51-123 Cours avancé de langue

(4261) Five prepared class periods. A course designed to meet the requirements of the Advanced Placement Examination in French Language. Open to students who have completed three terms of fourth-level French and to qualified new students. Emphasis is placed on vocabulary, conversation, composition, and reading, not only in literature, but in current newspapers and periodicals. The choice of texts is determined by the class and the instructor.

52-0 Cours avancé de littérature

(4270) Five prepared class periods. Open with departmental permission, to students who have completed three terms of fourth-level French and to others who are properly qualified. Primarily a seminar in which students discuss their interpretations of the works studied, the course also includes lectures and instruction in *explication de textes*. Preparation for the Advanced Placement Examination in French Literature includes the close reading of texts such as: *La Fontaine, Fables*; Racine, *Phèdre*; Beaumarchais, *Le Barbier de Séville*; Flaubert, *Un Coeur simple*; poetry of Apollinaire, and Baudelaire.

60-123 Littérature moderne

(4281) Two prepared class periods plus one weekly (4282) (90 minutes) seminar. Open to students who have completed fifth-level French or the equivalent. The course studies selected novels and dramas representative of the modern era. Emphasis is on particular writers and what they add to our understanding of the human condition in our times. Authors studied may include: Proust, Gide, Colette, Mal-

raux, Mauriac, Aragon, Saint-Exupéry, Giono, Anouilh, Giraudoux, Aymé, Camus, Sartre, de Beauvoir, Hébert, Laye and Senghor.

(9001) **Projets indépendants**

(9002) Qualified Seniors may undertake independent study projects in French under the direction of a faculty supervisor. Those who

wish to do apprentice teaching during either the Winter or the Spring Term will study the techniques and methods of modern language instruction and will practice, under careful supervision, in beginners classes. Apprenticeships are usually undertaken along with a program of independent reading and writing in French. (By departmental permission.)

German

The German Department offers a six-year course of study with the purpose of developing the ability to understand spoken German, facility in speaking, reading fluency, and the ability to write German correctly. Students who demonstrate unusual aptitude and interest during the first year are invited to enter special accelerated sections.

The more advanced courses may give an introduction to German literature since the eighteenth century and a survey of German history, culture and geography. At all levels, German is the language of the classroom. Extensive use is made of the language laboratory.

10—0 First-Level German

(4300) Five prepared class periods. The beginning course seeks to develop aural comprehension and oral expression, as well as a foundation in the basic grammar. The basic patterns of the language are practiced by repetition and variation. Basic text: *Deutsch Heute*, by Moeller and Liedloff (Houghton Mifflin).

12—23 First-level German (Honors) (T2) (a two-term commitment)

(4305) Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of one trimester of *German 10*. Successful completion of 12 enables students to enter 22. Texts are essentially the same as those used in *German 10* and *German 20*.

10—20—0 Accelerated First and Second-Level German (4310) Five prepared class periods. Open to Seniors, and to Uppers with permission. A year long accelerated introductory course covering in one year the essential material of *German 10* and *German 20*. Basic text: *Deutsch Heute*, by Moeller and Liedloff (Houghton Mifflin).

20—0 Second-Level German

(4320) Five prepared class periods. The systematic study of basic patterns and grammar is continued. Both close and comprehensive reading of modern German prose is practiced extensively. Elementary writing is introduced at this level. Some of the books read include Kessler, *Kurze Geschichten*; Schnitzler, *Der blinde Geronimo*; Remarque, *Drei Kameraden*; Sparks and Vail, *Der Weg zum Lesen*; Internationes, *Kurze Hörspiele*.

22—0 Accelerated Second-Level German

(4330) Five class periods. A yearlong accelerated course open to students who have successfully completed *German 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth-level courses. Texts and reading materials are essentially those of *German 20* and *German 30*.

30—0 Third-Level German: Selected Readings

(4340) Four prepared class periods. Emphasis is placed on reading comprehension, vocabulary building, and oral expression. Throughout the year grammar is reviewed in Sparks and Vail, *German in Review*. Some of the books read include Brecht, *Kalendergeschichten*; Dürrenmatt, *Der Richter und Sein Henker* and *Der Besuch der alten Dame*; Ödön von Horvath, *Jugend ohne Gott*; Frisch, *Biedermann und Die Brandstifter*.

40—123 Advanced German Language and Literature

(4351) Four prepared class periods. This course is designed to prepare for the Advanced Placement Examination in German Language. Open to students who have completed the equivalent of three trimesters of third-level German and to qualified new students. Emphasis is placed on vocabulary, conversation, composition, and reading, not only in literature, but also in current newspapers and periodicals.

50—123 Fifth-Level German

(4361) Four prepared class periods. Contents vary according to the needs and interests of the students, with an emphasis on significant literature.

60—123 Sixth-Level German

- (4371) Four prepared class periods. Contents vary according to the needs and interests of the students, with an emphasis on significant literature.

(9001) Senior Project

- (9002) Under the guidance of a member of the German Department, a Senior has the opportunity to do special work in German. It may include supervised teaching of an elementary class, or work of the student's own choice in a special field.

Italian

10-20—0 First and Second Level, Intensive

- (4400) Open to Seniors, and to Uppers with permission. Five class periods. Four additional meetings (35 minutes), to be arranged, will take the place of 1/2 of the usual homework obligation: these small sessions afford drill, and spontaneity in understanding and speaking Italian. A college text is supplemented by selected readings, recordings, and the libretti and music of Italian opera. (Dr. Pascucci)

Russian

Communication in Russian and a knowledge of Russian culture are essential for productive interaction with the U.S.S.R. in technology and science, and for achieving controlled, responsible international relations. Before studying Russian, many consider it strange and difficult; but its alphabet and vocabulary have the same sources as English, and it follows the same principles of grammar. Continuous oral, visual and instructional use quickly makes Russian familiar and enjoyable. The Russian Department offers a five-year course of study. This well-established program ensures confident progress in speaking, aural comprehension, reading, and writing. At the upper levels, students use Russian word processors for their compositions. Students who demonstrate unusual aptitude and interest during the first term are invited to enter special accelerated sections in the second term. It is the policy of the Department to attain exclusive use of Russian in the classroom no later than the middle of the first year.

10—0 Introduction to Contemporary Russian

- (4500) Five prepared class periods. A yearlong elementary course in speaking, listening, reading and writing. Texts: Kostomarov, *Russian for Everybody* (Russky Yazyk-Moscow); reference materials.

12—23 Contemporary Russian (Honors) (T2) (a two-term commitment)

- Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of the first trimester of *Russian 10*. Successful completion of 12 enables students to enter 22. Texts are essentially those of *Russian 10* and *Russian 20*.

13—3 A Short Course in Beginning Russian

- (4523) Four prepared class periods. Open to Seniors and Uppers. A term-contained introduction to speaking, reading, and writing Russian, using scientific, literary, and conversational text materials. This course enables students to feel comfortable with the somewhat different features of a Slavic language. It also gives a sound foundation for continuing courses in Russian language, history, and literature, whether at Andover or in college.

For another course related to Russian history and culture see History 338.

10-20—0 Intensive Contemporary Russian

- (4530) Five prepared class periods. Open to Seniors, and to Uppers with permission. A yearlong accelerated introductory course covering two years in one. Texts: Kostomarov, *Russian for Everybody*; reference materials.

20—0 Intermediate Contemporary Russian

- (4540) Five prepared class periods. Completion of the elementary course with continued emphasis on active use. Texts: Kostomarov, *Russian for Everybody*; Bond, *Russian Graded Readers* (Heath); reference materials.

22—0 Intermediate Contemporary Russian (Honors)

- (4550) Five prepared class periods. A yearlong accelerated course open to students who have successfully completed *Russian 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth-level courses. Texts and reading materials are essentially those of *Russian 20* and *Russian 30*.

30—0 Russian Expression: Conversation and Composition
(4560)

Four prepared class periods. Reading, conversation, and writing. Texts: Galejeva et al., *Start-II* (Russky Yazyk — Moscow). Reading materials include selections on Russian culture, history, geography, and Soviet civilization. Students use word processors in their composition work.

40—123 Advanced Russian Composition and Russian Classical Literature
(4571)

(4572) Four prepared class periods. Further work in conversation and writing, and an introduction to the "Golden Age" (19th Century) of Russian literature with selected readings from Pushkin, Chekhov, Gogol, Tolstoy and other writers. Texts: Muravyova, *Verbs of Motion in Russian* (Progress-Moscow). Students use word processors in their composition work.

50—123 The Soviet People, Their Heritage and Literature
(4581)

(4582) Four prepared class periods. Fall Term: RUSSIAN LITERATURE — readings from contemporary and prerevolutionary authors. Winter Term: SOVIET LITERATURE — an overview tracing the evolution of Russian literature from the Revolution through the war and post-war periods, and including writers in exile. Authors vary according to needs and interests of the class and may include Gorky, Bunin, Sholokhov, Bulgakov, Yevtushenko, Voznesensky, Solzhenitsyn.

Spring Term: THE SOVIET PRESS — a view of Soviet life and culture as reflected in the media. The text is a subscription to a major Soviet newspaper. Students use word processors in their composition work.

(9001) Senior Project

(9002) Under the guidance of a member of the Russian Department, a Senior has the opportunity to do special work in Russian. It may include supervised teaching of an elementary class or work chosen in a special field.

Spanish

The Spanish Department offers a six-year course of study. Students who demonstrate unusual ability and interest during the first year are invited to join an accelerated sequence. The language of the classroom is Spanish, and extensive use is made of the

language laboratory. Students learn to understand, speak, read, and write the language, and also are given a comprehensive introduction to the literature and culture of Spain and Latin America.

The Department offers various programs of study and travel abroad which enhance a student's language experience. School Year Abroad in Barcelona, Winter Term in Mexico, and the Madrid exchange are some of the possibilities. More information is available through language instructors.

10—0 Beginning Spanish

(4600) Five prepared class periods. A first-year course designed for those who have not studied Spanish before. The audio-lingual approach is used, stressing understanding and speaking. Text: *Spanish for Mastery II*, and workbook, Valette and Valette (D.C. Heath). These materials are supplemented by language laboratory practice, selected readings, and other audio-visual materials. Exercises in reading and writing are introduced as the student acquires confidence in oral expression.

11—0 First-Level Spanish

(4620) Five prepared class periods. For new students who have been exposed to Spanish but who are not fully prepared for *Spanish 20*. The course stresses the oral use of the language. Text: *Spanish for Mastery II*, and workbook, Valette and Valette (D.C. Heath) and selected readings. These materials are supplemented by language laboratory practice and other audio-visual materials.

10-20—0 Accelerated First and Second-Level Spanish

(4630) Five prepared class periods. Open to Seniors, and to Uppers with permission of Department Chairman. A yearlong accelerated introductory course covering two years in one. The basic texts are: *Spanish One* (Second Edition), by Jones/Ruiz Salvador (Van Nostrand); *Tres Farsas Contemporáneas y Un Secuestro* (see *Spanish 22*).

20—0 Second-Level Spanish

(4640) Five prepared class periods. Emphasis is on speaking, reading, simple theme writing, and vocabulary building, including the use of synonyms and antonyms. Oral fluency is stressed in accordance with the principles of the audio-lingual method. The basic text is: *Pasajes: Lengua* by Bretz, Dvorak and Kirschner (Random House), and the accompanying *Cuaderno de Práctica*. Selected readings are used to supplement the text.

22—0 Accelerated Second-Level Spanish

(4650) Five prepared class periods. Open to students who have completed *Spanish 10* or *11* with distinction, and to other qualified students with departmental permission. It covers the equivalent of the material of *Spanish 20* and *Spanish 30* and enables students to enter *Spanish 40* or *42*. Texts: *Pasajes* by Bretz, Dvorak and Kirschner (Random House); *Cuentos y Microcuentos*, by Guillermo Castillo-Feliú (Holt, Rinehart & Winston); *Tres Farsas Contemporáneas y Un Secuestro*, by Martínez-Ballesteros, Rubio and Whitehead (Independent School Press) and selected readings. In Spring Term students occasionally read and stage a one-act play in Spanish.

Third-Level Courses

Enrollment for *Spanish 30A* is by permission of Department Chairman. All other electives may be chosen in any sequence: they are of equal difficulty, continue the development of all language skills, and are unified by a common grammar syllabus (Couch, McCann, Rodríguez-Walter, Rubio-Maroto, *Una vez más*, Independent School Press).

30A—0 Spanish Language Review

(4660) Five prepared class periods. For students who have successfully completed *Spanish 20*, but need reinforcement in basic language structures. The goals of the course are achieved through the use of an intermediate grammar text, and readings which are selected according to the needs of the students. By permission of the Department Chairman.

31—123 Culture and Civilization of the Hispanic World

(4671) Four prepared class periods. An intermediate course which takes a social-studies approach to the culture and civilization of the Hispanic world. Students must have demonstrated a strong ability for oral and written self-expression and an interest in historical and cultural themes. This course is particularly well suited for the bilingual student.

32—123 Introduction to Literature

(4681) Four prepared class periods. An intermediate course in which students will continue to develop oral and written expression of Spanish through the study of literature. Students will read, discuss and analyze works by Spanish and Latin American authors. The readings, which vary by trimester, include short stories, a play and a novel.

34—123 Conversation and Composition

(4691) Four prepared class periods. An intermediate course which has as its principal goal the development of conversational and writing skills by dealing with topics of a general and contemporary nature.

35—2 Winter Term in Mexico

(4702) Students enrolled in a Spanish course at the 22 level or above may elect to spend the Winter Trimester in Mexico. Students intending to enroll in this course will do special research during the Fall Trimester under the direction of Mr. Couch and other members of the department. Interested students should see their Academic Advisor to be sure that their other courses and their diploma requirements will permit them to be off campus for that trimester. Final approval for participation in the program will be granted by the Dean of Studies.

40—123 Spanish: Language, Literature, Culture

(4711) Four prepared class periods. The purpose of the course is to review, refine and expand speaking, reading and writing skills and to further the student's interest in the Hispanic world through varied readings in history, literature, and current events.

Students may choose to take the A.P. Examination in Spanish Language. Texts used in the past have been: *Autoretratos*, ed. Durán; *Trabajo y Vida*, (Newbury House); *Relatos Simbólicos*, (Heinle & Heinle Co.); *Curso intensivo de español*, (Nivel Superior) (E.D.I.- 6, S.A.); various selections, literary and non-literary, from print and other media.

42—0 Spanish and Latin American Literature

(4720) Four prepared class periods. The course presupposes an extensive knowledge of grammar and vocabulary and a reasonable fluency in conversation. Emphasis is on written work, discussion and analysis of literary works. Students may take the Advanced Placement Examination at the end of this course if they so desire. Texts: Representative works of Ana María Matute, Unamuno, F. García Lorca, J.L. Borges, Pablo Neruda, and other literary works which complement the study of these major authors.

52—0 Advanced Spanish and Latin American Literature

(4730) Four prepared class periods. The course is open to students who have the equivalent of *Spanish 40* or *42*, or with the permission of the Instructor. This course prepares the student for the Advanced Placement

Examination in Spanish Literature or Language. The course is an in-depth study of two significant authors each term. In the past the following texts have been used: *Cien años de soledad*, by García Márquez (Editorial Sudamericana, Buenos Aires); *Tres novelas ejemplares y un prólogo*, by Unamuno (Austral); *Antología Esencial*, by Pablo Neruda (Losada); *Ana María Matute*, Martí and Rubio (Independent School Press); *Cinco Maestros*, by Coleman (Harcourt, Brace and World, Inc.); *Fulgor y Muerte de Joaquín Murieta*, by Pablo Neruda.

60—123 Special Literary and Cultural Topics in

(4741) Spanish

(4742) Four prepared class periods. Contents vary according to the needs and interests of the student.

(9001) Senior Project

(9002) Qualified Seniors may undertake projects of independent study in Spanish under the direction of a faculty advisor. They may also

do apprentice teaching in beginning classes under faculty supervision.

See also Latin American Studies (History 348) listed under History and the Social Sciences.

Music

The diploma requirement in Music for entering Juniors and Lower Middlers is one trimester of music, which is satisfied by *The Nature of Music* (Music 20 or 21). This course is also a prerequisite for courses in the History and Appreciation and the Theory categories, but is not a prerequisite for the Applied category. Entering Upper Middlers must take a trimester course in Music or Art at the Academy: *Music 20* or its equivalent.

Entering Seniors need not take a Music course. Exemption from *Music 20* as a prerequisite is granted on the basis of an exam and/or by permission of the Department Chairman. However, there is no exemption from the Music diploma requirement.

APPLIED

15—123 Fidelio Society

(6151) Pass/Fail. Three prepared periods. Open to all classes. This small group of mixed voices is selected from the *Chorus* (Music 17). It per-

forms on numerous occasions throughout the year both on *Chorus* programs and on its own. Its repertoire includes music of all types, early and modern, sacred and secular. Membership is by audition and is conditional upon good standing in the *Chorus*. This course, if failed, cannot be made up by examination.

16—123 Band

(6161) Two double periods. Open to all qualified students. Tryouts are held any time before the beginning of a term to test the student's ability and to arrange for seating. Volunteers

from all classes who are not enrolled for credit are urged to join, on an extra-curricular basis. There are some school-owned instruments available for student use. All types of music for wind ensemble are rehearsed. It includes marches as well as classical, popular, and show music. Much sight reading is done, and at least one public concert per term is given.

17—123 Chorus

(6171) Two double periods. Open to all qualified students. The *Chorus* is the Academy's major singing group, comprised of mixed voices, and performs a variety of choral works, both

sacred and secular. No previous choral experience is necessary; just a desire to work hard and enjoy a unique choral experience.

18—123 Chamber Orchestra

(6181) Two double periods. Open to all classes. Most of the music played is for string orchestra; the best winds in the School are invited to join for larger works. One concert a trimester is regularly scheduled and the orchestra also

plays at least once a trimester in the Sunday Chapel service. The membership includes several students from the community who want orchestral experience that is not available in their own schools, and several members of the faculty. While *Chamber Orchestra* may be elected as a credit-bearing course, it is also an activity in which all are invited to participate.

19—123 Private Instrument and Vocal Lessons

(6191) Two class meetings plus required concert attendance. Lessons are available on all orchestral instruments including, in addition, piano (classical or jazz), guitar, saxophone, organ, harpsichord, carillon, and voice.

In addition to practicing daily, the credit students are expected to meet the following commitments: 1) a once

per week meeting with their private instructor; 2) a once per week seminar, providing a broader practical/theoretical background (credit students would be assigned seminar groups according to their instrument and background); 3) a required attendance of three concerts, on campus, per term.

There is a charge of \$180 per term for half-hour instruction, or \$250 per term for full-period (50 minutes) lessons, and a nominal fee for use of practice pianos and organs. Orchestral and Band instruments are available for rental. **NOTE:** Beginners (as defined by the Department) **MUST** take two consecutive terms of *Music 19* if they are enrolled as credit students.

20—1 The Nature of Music

- (6201) Five prepared class periods. This course is designed to give a general background in history, theory, and practical aspects of music. Music from its earliest sources to the present is examined. Also, the role of music and the arts in each of its cultural stages is studied. Students receive some firsthand experience with musical instruments. No previous experience in music is required.

21—1 The Nature of Music (for Juniors)

- (6211) This course covers the same material as *Music 20* (see above), but is designed specifically for those Juniors whose verbal and writing skills may be weak. Juniors with no such demonstrated weaknesses may take *Music 20*.

HISTORY AND APPRECIATION

The Nature of Music (Music 20 or 21) is a **prerequisite** for all courses in this section.

26—123 Seminar in the History of Music

- (6261) Two class meetings. Open to Lower and Upper Middlers and to Seniors. This course, taught in seminar fashion, is one where a great deal of reading, listening, and analysis is expected to take place outside the classroom. The composer or composers and era to be studied each term will be decided by the class and the Instructor. (Sample topics: Beethoven and the Era of Revolution; The Life, Times and Music of J.S. Bach.) Hours to be arranged.

27—123 Independent Study in the History and Literature of Music

- (6271) Four prepared class periods. Open to Upper Middlers and Seniors. A student who has

taken at least one trimester of *Music 26* may, with the permission of the Instructor, pursue an independent course of study in either a particular type of music or a particular period of music.

28—3 Jazz

- (6283) Four prepared class periods. Open to Upper Middlers and Seniors. A study of the history of classic jazz, dating back to its roots in Africa, its development in New Orleans, its spreading to New York and Chicago, and its influence on music today. A survey of ragtime, blues, Dixieland, fox-trot, on through the big band era of the thirties, concluding with the jazz rock of today. A study of the influence and contributions of the major personalities such as W.C. Handy, Jelly Roll Morton, Louis Armstrong, Basie, Whiteman, Gershwin and the rest of the greats.

THEORY

The Nature of Music (Music 20 or 21) is a **prerequisite** for all courses in this section.

32—123 Conducting

- (6321) Hours to be arranged. Open to Upper Middlers and Seniors. A course in conducting and basic musicianship. This course is designed to give the student an introduction to the conductor's world through developing conducting skills and score analysis.

33—1 Theory of Music I

- (6331) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course offers an introduction to harmonic progression, triads, modes, rhythmic coordination with dictation. Some original work is also expected.

34—2 Theory of Music II

- (6342) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Prerequisite:** *Theory of Music I* or permission of the Instructor. This course deals with harmonic progressions, modulations, figure bass, and an introduction to counterpoint and harmonic analysis.

35—3 Theory of Music III

- (6353) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Prerequisite:** *Theory of Music II* or permission of the Instructor.

tor. This course includes advance figure bass, more complex chords, and a brief introduction to nineteenth and twentieth century techniques.

36—1 Electronic Music

- (6361) Four prepared class periods. **Prerequisite:**
 36—2 *The Nature of Music* (Music 20) or permission
 (6362) of the Department Chairman. A course for
 36—3 the benefit of those who seek to expand their
 (6363) domains of creativity by understanding and
 utilizing the conceptual approaches inherent

in electronic music synthesizers and related equipment. Using a practical approach, the course begins with the care and feeding of the tape recorder and proceeds to the functioning and operation of electronic music modules. A lab fee of \$15.00 is charged for the use of the synthesizer.

40—123 Advanced Techniques in Electronic Music

- (6401) Four prepared class periods. **Prerequisite:**
 (6402) *Electronic Music* (Music 36). A course de-
 (6403) signed for the continuation of the skills and
 techniques developed in Music 36. A lab fee
 of \$15.00 is charged for the use of the synthesizer.

Philosophy and Religious Studies

The Department seeks to initiate students into three distinctive human quests: the search for meaning, the search for justice and the search for the foundation of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered at a variety of levels. All courses involve four prepared class periods.

The department diploma requirement is successful completion of any one trimester course; this requirement applies only to those who attend Phillips Academy for three or four years, beginning with Juniors and Lovers who enter in September 1983.

20—3 The Biblical World View: An Introduction

- (7203) Four prepared class periods. Open to Juniors and Lower Middlers. Why was the world

created? Why are we humans placed on this earth? What are we like? What should we try to achieve in life? How should we treat one another, other creatures, and the planet on which we live? For many centuries the Bible provided for many people a response to such questions. In our day, however, the message has become both unclear and increasingly unfamiliar. In this course we shall look at the composition and the historical setting of the Bible (Old Testament), then read selected passages of Biblical narrative and reflection which introduce persons and principles central to the Biblical view of the world, its inhabitants, and its Creator. (Rabbi Gendler)

21—1 Introduction to Ethics: Discernment and Decision

- (7211)
 21—2 Four prepared class periods. Open to Juniors
 (7212) and Lower Middlers. Rooted in concrete is-
 21—3 sues and experiences of everyday living this
 (7213) course provides an introduction to the skills
 of discernment. Drawing case studies from

literary and topical sources, bioethics, law and education, the class will critically investigate the often unspoken presuppositions that give rise to moral decision. (Dr. Avery)

23—1 The New Testament Perspective

- (7231) Four prepared class periods. Open to Juniors
 23—2 and Lower Middlers. The course will consid-
 (7232) er, in their cultural and historical context,
 the person and teaching of Jesus of Naza-

areth, the development of the early Christian community and the religious claims of that community concerning the Christ. (Fr. Gross)

30—1 Introduction to Non-Western Religions

- (7301) Four prepared class periods. Open to Lower
 30—2 and Upper Middlers and Seniors. This
 (7302) course provides a brief introduction to four
 30—3 of the world's major religions: Islam, Hindu-
 (7303) ism, Buddhism, and Taoism. Huston Smith's
 classic, *The Religions of Man*, is the text. Addi-

tional readings are drawn from basic religious texts of the traditions. (Rabbi Gendler, Ms. McCaslin)

32—2 Post-Biblical Jewish Thought: Responses to the Holocaust

- (7322) Four prepared class periods. Open to Lower
 and Upper Middlers and Seniors. An exploration of the
 holocaust through diaries, memoirs, works of fiction,
 poetry, and later reflections on the phenomenon.

Questions to be dealt with will include: what was it like for the victims? What was it like for the Nazis? How

could it have happened? What elements from Jewish, Christian and secular tradition contributed to its possibility? What have been some of its effects on our own feelings about life and human beings? How have various Jewish, Christian, and secular thinkers responded to the challenge of this event? (Rabbi Gendler)

33—1 Understanding Religion: An Introduction

(7331) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. A critical examination of human experiences and practices in diverse religious and non religious contexts, in particular: ecstasy, myth-making, ritual expression and the disciplines

of meditation and prayer. Concepts and models of understanding are introduced as useful tools with which to approach the phenomena of religion. (Dr. Avery, Ms. McCaslin)

36—1 Proof and Persuasion

(7361) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. A practical introduction to informal logic and to the philosophical study of language. Some of the questions raised are: What is the difference between a good argument and a poor

one? What are the common fallacies of Thought? What are the limitations of logic? What is the meaning of "meaning" and the truth about "truth?" The course stresses the development of individual skill in argument and includes a critical examination of the patterns of thought one encounters every day in magazines, newspapers and on television. (Mr. Hodgson)

41—1 Views of Human Nature

(7411) Four prepared class hours. Open to Upper and Lower Middlers and Seniors, and to Lower Middlers with permission of Instructor. A critical examination of existentialism, psychology,

biology, anthropology and transcendentalism in light of the answers they provide to the following questions: Does man have a characteristic nature? What are his basic needs, rights, obligations and values? Is man free? Is man responsible for his actions? Given an understanding of man, how should we structure society to satisfy his needs and take advantage of his potentials? Readings: Jean-Paul Sartre, *Existentialism is a Humanism*; R.D. Laing, *The Politics of Experience*; B.F. Skinner, *Walden Two*; Sam Keen, *Apology for Wonder*. (Mr. Hodgson)

42—1 Bioethics

(7421) Four prepared class periods. Open to Upper Middlers and Seniors. Do our genes determine our behaviour and biology our values?

(7422) Should we be conducting scientific experiments on live animals and our fellow human beings? How much is a salt marsh worth? Should the government be telling physicians what they may or may not do? Is there any ethical limit to genetic engineering? What is ethics anyway? Using primary resources written by scientists and physicians, lawyers and philosophers, the course examines these and other issues raised when biology, biotechnology, and ethics intersect. The purpose is to enable participants to make their own informed decisions about the choices presented to our society by recent developments in biology and medicine. (Dr. Avery)

43—1 Law and Morality

(7431) Four prepared class periods. Open to Upper Middlers and Seniors, and to Lower Middlers with permission of Instructor. A critical examination of an intricate web of problems

which arises out of the relationship between law and morality. Questions of concern include: Does society have the right to restrict the behavior of an individual? On what, if any, grounds are such restrictions justifiable? To what degree should society incorporate "popular" morality into law? Is an individual ever morally justified in breaking the law? If so, under what circumstances and in what fashion? Readings include selections from Plato, Hobbes, R.P. Wolff, Lord Patrick Devlin and Martin Luther King, Jr. Specific issues include abortion, pornography, racial and sexual discrimination and civil disobedience. (Mr. Hodgson)

44—2 Nonviolence in Theory and Practice

(7442) Four prepared class periods. Open to Upper Middlers and Seniors. The militarily most destructive century in human history, our twentieth century, has also been one in which such men as Gandhi and Martin Luther King, Jr., have successfully applied nonviolence to conflict situations. What is the theory of this approach to human conflict? What are some of its psychological assumptions? What is its religious and human significance? By what means does it operate? What are its prospects for the age ahead? We shall use case histories, the testimonies of those directly involved in such struggles, films, critical and theoretical studies in trying to clarify and comprehend some of these elements of nonviolence. Readings include Joan Bondurant's *The Conquest of Violence* as well as writings of Gandhi and King. (Rabbi Gendler)

45—3 In Search of Meaning

(7453) Four prepared class periods. Open to all Upper Middlers and Seniors and to Lower Middlers with permission of Instructor. The reflective person is confronted with questions that hunger to be answered yet elude definitive, "objective" answers. The person's faith is often what sustains him/her and provides "subjective" answers to these fundamental questions. The issues of creation, of death, of evil, of identity, of purpose, all challenge one's faith. This course (which takes its title from Victor Frankel's book) will consider these issues from a faith perspective using Scripture, literature (i.e. *Equus*, *No Exit*, *The Little Prince*, *The Shadowbox*, *Man's Search for Meaning*, *I Heard the Owl Call My Name*, etc.) and other materials. (Fr. Gross)

46 The Ethics of Food and Development (Not offered in 1985-86)

Four prepared class periods. Open to Upper Middlers and Seniors. In an interdisciplinary manner, the course will examine patterns of nutrition in different cultures and critically assess various accounts of the extent of hunger, its relative importance as an issue, its causes and remedies. Particular attention will be paid to the values implicit in various methods of food production, population control schemes, land tenure patterns, social and political orders, economic development models and international economic relationships. Students will develop and present a case study of the issue in food and development facing a particular country.

50—2 Existentialism

(7502) Four prepared class periods. Open to Upper Middlers and Seniors. The term "existentialism" covers a broad range of attitudes and values that are joined together by an emphasis on human existence. The authors brought together in its name share a characteristic concern for the problems of meaning, identity and choice that confront men and women in everyday life. The lectures, discussions and readings are designed to help us locate and express these problems as they confront each of us in our own lives and to assist in understanding and resolving them by drawing on the experiences and insights of the major existentialist thinkers. Readings: Nikos Kazantzakis, *Zorba the Greek*; Friedrich Nietzsche, *Thus Spake Zarathustra*; Jean-Paul Sartre, *No Exit and Being and Nothingness*; Soren Kierkegaard, *The Sickness unto Death*; Martin Buber, *I and Thou*. (Mr. Hodgson)

51—1 In Search of Justice: from Socrates to Marx

(7511) Four prepared class periods. Open to Upper

Middlers and Seniors. God, emotion, logic, social necessity and economic laws have all been invoked as the final arbiter of justice. The class will examine the major answers to the problem developed by Plato, Aristotle, Mill, Marx and others. The course aims to assist critical awareness of the ultimate criteria of one's own evaluations and those of others so that she/he be better equipped to make her/his own contribution to the never-ending search for justice. (Dr. Avery)

52—1 Great Philosophers

(7521) The great philosophers challenge us to address difficult and fascinating questions that perennially face mankind: What is the good life? What are the sources of human experience? Is there anything we can know with certainty?

Does God exist? What is the relationship between my mind and my body? This course critically evaluates the responses of Plato, Descartes, Hume and Whitehead. (Mr. Hodgson)

Physical Education

All Juniors and new Lowers are required to elect one trimester of *P.E. 10* in addition to their regular athletic commitment.

10—1 Physical Education

(9201) Pass/Fail. Limit of 15 students per section.

10—2 Five class periods per week. A course integrating health and fitness concepts with self-testing and challenge activities; two class

10—3 periods per week are spent using the running track, weight room, ropes course and

other areas of the athletic complex. Two class periods are devoted to drown-proofing survival swim technique and C.P.R. training. One period per week is lecture-discussion, requiring some outside reading or other preparation. If the course is failed, the student will repeat it, in full or in part, during a subsequent term.

Psychology

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strate-

gies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained.

32—1 Introductory Psychology

- (7021) One double period and two prepared class periods; for Uppers and Seniors. A survey course designed to introduce the student to the complexity and diversity of psychological inquiry. Emphasis is placed on the application of basic psychological principles to individual experience in order to expand awareness of both self and others. In addition, the broader implications of psychological findings for an integrated understanding of human development and behavior are considered. Topics to be covered may include: psychoanalytic, behavioral and humanistic theories of the person, psychosocial, cognitive, moral and early childhood development, human motivation and personality, abnormal behavior and dreams. Lectures are designed to catalyze discussion. A combination of objective examinations and individualized writing assignments are utilized to evaluate the student's learning.

33—3 Human Sexuality

- (7033) One double period and two prepared class periods; for Uppers and Seniors. This course is designed to help students understand the facts of sexuality from the biological, social and psychological points of view. While there is sometimes a tendency to separate mind from body, the perspective of the course is that mind, body and psyche are all involved in sexuality, often in complex and mysterious ways. In addition to the biological facts, topics to be covered include misconceptions and mythologies of sexual growth and development, masculine and feminine psychology, varieties of intimate relationships and variations in sexual life styles. There is a strong emphasis on discussion in class and self-reflection. In addition, the format of the course includes readings, films, case analysis, quizzes and a final paper. This course, if failed, cannot be made up by examination. (Dr. Jackson)

40—2 Human Relationships

- (7102) One double period and two prepared class periods; for Uppers and Seniors. Pass/Fail.

The many dimensions of human relationships are explored. Emphasis is placed on assisting the student to articulate his or her emerging psychological awareness of personal and social relationships. Primary source readings and structured experiential exercises are used to develop an understanding of psychological concepts as rooted in individual experience. Topics to be considered include: core human conflicts, characteristics of the healthy individual in relationship to others, how power, body language and family communication styles shape relationships, and the impact of social structures on intimate relationships. This course, if failed, cannot be made up by examination. (Dr. Rosenberg)

42—2 Group Theory and Process (Not offered in 42—3 1985-86.)

Two double class periods; for Uppers and Seniors. Pass/Fail. The topic for study in this course is human behavior in small groups. Human beings do most of their living, working and playing in small groups ranging in formality from family to classroom groups. The relationships among the members of these groups develop through similar stages and by common processes which determine to an important extent the effectiveness of the group in achieving its goal. These stages and processes are a response to two basic human needs: the need for belonging and community, on the one hand, and the need for separateness and individual identity, on the other. The classroom group provides students with a laboratory in which to experience and observe group process. Students read articles in the professional literature and write papers on topics that reflect upon their learning. This course, if failed, cannot be made up by examination.

Science

Since Andover students arrive with various levels of experience in science, there are courses offered in biology, chemistry and physics at several degrees of sophistication. The courses are arranged so that a single course may be taken in any of the three major fields at a level appropriate to the aptitude of the student, or several courses of increasing difficulty may be taken should some degree of specialization be desirable for certain students. There are also available introductory science courses (*Science 10-18*) for Lower and Juniors and some other specialized courses (*Science 31-35*) for Uppers and Seniors.

In general, students are encouraged to take a variety of courses in physical and biological science and not to specialize in a single branch of science. For students with special interests, individual project work for credit is open to Seniors on a pass/fail basis and is arranged through the office of the Dean of Studies.

Although a single laboratory course in biology, chemistry or physics at the 20 level or above prepares the student for the College Board in that subject and meets the diploma requirement in science, students are encouraged to take more courses in science to broaden their base of scientific awareness and to broaden career options. There are courses available in biology, chemistry and physics which prepare students for advanced placement examinations in each science.

Science Introductory Physical Science

10-2 Five class periods. Open to Juniors with limited backgrounds in science. The course will deal with some of the basic concepts of physics and chemistry by means of classroom work, problem solving, and laboratory experiments.

Science Introductory Chemistry

11-2 Open to Juniors. Four prepared periods per week. This course is designed for students who have no background in chemistry and are planning to take *Biology 30*. Topics such as acid-base chemistry, bonding, shapes of molecules, the mole concept, and elementary organic chemistry will be covered. There will be laboratory work.

Science Introduction to the Geosciences

12-1 Open to Juniors. Four prepared class periods per week. Laboratory work is accomplished during class periods and involves study of satellite and aerial photos, slides, maps and various specimens. Typical areas of study include volcanoes, fossils, earth resources, oceans, gemstones, crystals and earthquakes.

Science Introduction to Ornithology

13-3 Three prepared class periods and one (double) unprepared laboratory period. Designed primarily for Juniors, the course will cover many of the various orders of Class Aves, concentrating primarily on the songbirds and waterfowl of Eastern

Massachusetts. Anatomy, physiology, and behavioral aspects of the winged world will be supplemented by laboratory field trips to many of the dynamic bird habitats in the immediate area. The course will culminate with a trip to Parker River National Wildlife Refuge (Plum Island) in Newburyport, Massachusetts, an environment rich in migratory and nesting birds.

Science Natural History

14-1 Four prepared class periods. This is an introductory course designed primarily for Juniors and Lower who have not taken *Biology 25* or *30* or their equivalent. Through making collections and field observations, students will become familiar with the more common insects, trees, reptiles, birds, rocks, planets and constellations seen in the Andover area. Techniques in observations, collection and preservation will be stressed. Films and slides on the evolution of the living things we study will complement the classroom portion of the course.

Science Oceanography

15-2 Four prepared class periods. This is an introductory science course designed primarily for Juniors and Lower who have not taken *Biology 25* or *30* or their equivalent. The 70% of our earth's surface comprising the oceans is examined from a number of physical, chemical, and biological perspectives. Accordingly, we investigate aspects of sea-water chemistry, mechanisms of wave propagation and current generation, and interactions among the thousands of living organisms found in or near the sea. Films and slides complement the classroom portion of the course.

Science Ecology

16-2 Four prepared class periods. Open to Juniors and Lower Middlers. The course is designed to introduce students to the basic concepts of ecology. The material offered explores the meaning of interdependence and interrelationships within environment; population dynamics; trophic levels and energy; adaptation; succession; and the impact of man upon his environment and some of the problems caused by his use and abuse of basic resources. Class material is coordinated with and reinforced by laboratory studies of population growth, computer programs to study environmental problems and pertinent field trips. One of the major objectives of the course is to develop within the student an understanding of and sensitivity to the balance and beauty of nature.

Science Introduction to Zoology

17—1 Four prepared classes per week, one of which will be used for laboratory work. This is a one-term course designed for Juniors and Lowers who have not taken *Biology 25* or *30* or their equivalent. A study will be made of the similarities and differences among the major animal divisions from the most primitive invertebrates to the most complex vertebrates. Areas of concentration will include the basic systems of each phylum (*i.e.*, digestion and reproduction), as well as the ecological role and the evolutionary development of the organism. Lab periods will be used to develop techniques of dissection while studying the anatomy of animals from selected phyla.

Science Introduction to Observational Astronomy

18—3 Four prepared class periods, with one period each week used for observation. This course is intended for Juniors and Lowers who want to become familiar with the universe in which we live. Topics include a survey of the sky, lunar observation, the origin of the solar system, celestial distances and motions, and a brief introduction to stellar evolution. Students identify constellations, track planets, and learn how to observe using a telescope.

Science Observational Astronomy

31—1 Four prepared class periods, with one period used for observation each week. This course is designed for Uppers and Seniors who are interested in a college level survey course in modern astronomy from the earth to the stars. Topics include celestial measurements and coordinates, solar astronomy, planetary science, with particular emphasis on stellar evolution from gaseous nebula to dwarfs, red giants, white dwarfs, neutron stars, and black holes. Observational projects involve the naked eye, binoculars, telescopes in Thornton Observatory and astrophotography. Not open to students who have had *Science 18*.

Science Cosmology

32—2 Four prepared class periods. This course is open to Uppers and Seniors. Cosmology is the study of the universe as a whole, and its evolution. Topics include galactic structure and large organization in the universe, modern theoretical models, physical evidence, the standard model of the Big Bang, galactic evolution, the search for extra-terrestrial life, and the future of the universe. Telescope observation, movies, guest lectures and a field trip augment the course.

Science Electronics

33—3 Four class periods per week. **Prerequisite:** (8533) previous completion of or concurrent enrollment in a physics course, enrollment in at least *Math 35*, and permission of the Instructor. A course in modern solid state linear and digital electronics leading to a fundamental understanding of microcomputer hardware through consideration of circuit elements and their combinations, operational amplifiers, various types of diodes and transistors, integrated circuits, and Boolean algebra and its implementations. There will be considerable laboratory work.

Science Geology

34—3 Four prepared class periods, with two periods used each week for laboratory work. A general introduction to physical geology, to include crystal growth, minerals, measurement of geologic time by radioactivity and fossils, volcanoes, seismology and earth structure, deformation of strata, faults, plate tectonics. Some attention to disasters of geological origin, *e.g.* earthquakes, tidal waves, eruptions.

For other term-contained science courses open to Uppers and Seniors see individual listings in the Biology, Chemistry, and Physics sections of this book.

Biology

The Biology Department offers two yearlong introductory level courses, each of which satisfies the diploma requirement for a laboratory science. Each course meets four times a week for 3 classroom periods and one double-period laboratory session which includes training in the use of the compound and stereoscopic microscopes and other laboratory equipment. Laboratory work requires careful observation, mastery of techniques and accurate recording and interpretation of results. Part of the Spring Term is set aside for work on individual or group laboratory projects. Juniors who wish to enroll in either *Biology 25-0* or *Biology 30-0* MUST obtain permission from the Department Chair.

A student entering Phillips Academy as a Lower, Upper, or Senior who wishes to receive credit for an exemption on the strength of a course taken in the 9th grade at another school may do so upon passing a validation test to be administered after the student arrives at Andover.

25—0 Introduction to Biology

(8100) This course is intended primarily for Lower Middlers with little previous exposure to science. A topics approach usually centered around laboratory experiences is employed in order to acquaint students not only with fundamental biological principles but also with the methods and techniques used to elucidate them. Attention is paid to the processes by which scientific evidence is gathered, interpreted, and summarized. (This course is not open to Seniors.)

30—0 Biology

(8110) This is a survey course for those students with previous exposure to some of the basic principles of science. It stresses the unity of life, rather than the diversity, by emphasizing the functions common to all living things. It covers, in plants, animals, and microorganisms, the fundamental principles of metabolism (including nutrition, gas exchange, materials transport, excretion, and homeostasis), responsiveness and coordination, reproduction and development, genetics, evolution and ecology.

32—3 Biology

(8123) Not open to Seniors. This course covers the same material as the first trimester of *Biology 30-0*. ALL students who enroll in this course MUST also enroll in *Biology 35-12 (T2)* during the following Fall and Winter (see below).

35—12 Biology (T2) (a two-term commitment)

(8134) **Prerequisite:** *Biology 32-3*. This course covers the same material as the Winter and Spring trimesters of the yearlong course, *Biology 30-0*.

The following four term-contained courses are designed for those students who would like to take biology beyond the 25 or 30 level. For those students who wish to take the Advanced Placement Examination, we recommend taking *Biology 41, 43, and 44*. (A year of chemistry and/or physics is also strongly recommended.) These courses, however, are not designed exclusively for students who wish to take the Advanced Placement Examination in biology. *Biology 25 or 30* or their equivalent, is a **prerequisite** for *Biology 41, 43, and 44*.

41—1 Evolution and Ecology

(8151) Three class periods and one double laboratory period per week. The major unifying theme in the study of biology is that all life has evolved from a common ancestor. This

course will discuss the ideas of the pre-evolutionists, Darwin, and the neo-Darwinists. The mechanism of natural selection will then serve as a foundation for the discussion of the basic concepts of ecology such as the ecosystem, energy flow, succession, and relationships between populations. Problems of societal concern such as environmental ethics and our altering of our own evolution will also be discussed. A project or a research paper will be required. (This course, *Biology 43* and *Biology 44*, form an Advanced Placement sequence.)

42—1 Animal Behavior

(8161) Three class periods and one double laboratory period. The course is designed to familiarize the student with the basic principles of animal social behavior. The topics which receive the greatest emphasis are: territoriality, altruism, mating strategies, courtship, parental behavior, migration, dominance, and the evolution of behavior patterns. Throughout the course, an effort is made to relate the behavior of animals to the behavior of humans. A project or a research paper will be required.

43—2 Molecular Biology

(8172) **Prerequisite:** *Biology 25* or *30* and one term of chemistry or permission of the Instructor.
43—3 Five prepared classes per week. Following a brief review of chemical principles, the course examines the major classes of biomolecules and how they are synthesized and degraded in the cell. Particular emphasis is placed on those reactions which are associated with energy conversion pathways such as respiration and photosynthesis. Enzyme function is considered both in terms of mechanisms of action and with regard to kinetics. The relationship between structure and function at the molecular level is emphasized in studies of the plasma membrane, gene interaction, and control of genetic expression. (This course, *Biology 41* and *Biology 44*, form an Advanced Placement sequence.)

44—1 Human Physiology

(8181) Five prepared classes per week. An in-depth consideration of the major systems of the human body. All lab work will be done during a two-week period, devoted solely to the dissection of a cat (or rabbit) and to microscopic slide study of the major tissues of the human body. A fully documented research paper will be required. (This course, *Biology 41* and *Biology 43*, form an Advanced Placement sequence.)

Chemistry

25—0 Introduction to Chemistry

(8200) **Prerequisite:** Completion of *Mathematics 10* or the equivalent. For Lower Middlers and Upper Middlers who have NOT completed their Phillips Academy mathematics requirement. Three recitation periods and one double laboratory period. The course includes a systematic study of matter and the changes it undergoes — with the Spring Term devoted to organic chemistry. Emphasis is placed on the reasoning involved in the development of modern theory and general concepts rather than memorization of descriptive chemistry. Laboratory work is closely related to topics covered in recitation.

30—0 Chemistry

(8210) **Prerequisite:** Completion of *Mathematics 20* or the equivalent. Three recitation periods and one double laboratory period. The course is designed for students with more maturity and mathematical background than those taking *Chemistry 25*. As in that course, the modern theoretical framework of chemistry is emphasized, and the laboratory work is closely related to topics covered in recitation. These topics are treated in greater depth and with more emphasis on quantitative rather than qualitative answers. Less time is spent on organic chemistry than in *Chemistry 25*.

36—2 Chemistry of the Environment

(8222) Four prepared class periods. Open to Seniors and Uppers. Lower must have the permission of the Instructor. This course is concerned with the effect of chemistry on the citizenry. Current issues — such as acid rain, chemical safety, waste disposal, and air and water pollution — are discussed. Chemical theories and principles are introduced as needed. Laboratory work and periodical readings are integral components. Not open to students who have had a year-long course in Chemistry, or *Chemistry 41*.

41—1 Short Introduction to Chemistry

(8231) Three recitation periods and one double laboratory period. For Seniors who have not had a course in chemistry. This course covers the basic principles of chemistry — such as the periodic table, chemical bonding, acid-base chemistry, the pH scale, and simple chemical arithmetic. Emphasis is placed on examples from organic and biochemistry. In addition to the text there will be assigned articles from the "Scientific American." (Dr. Minné)

42—2 Research in Chemistry

(8242) **Prerequisite:** At least *Chemistry 25* or *Chemistry 30* completed with distinction, and permission of the Instructor. One prepared period and three unprepared, double laboratory periods, or the equivalent. Each student selects a research project in consultation with the Instructor and then carries out the necessary work. (Dr. Minné)

43—3 Organic Chemistry

(8253) **Prerequisite:** Completion of either *Chemistry 25* or *30*. Three recitation periods, and one double laboratory period. Students interested in medical or biological fields or in additional chemistry must generally wait until the college sophomore year before studying organic chemistry, the chemistry of carbon compounds. This course is a prior introduction to this critically important and fascinating subject.

Organic chemistry is largely non-mathematical and descriptive in nature. Students will use a condensed "minicourse" text, learn many of the laboratory techniques unique to organic chemistry, make use of three-dimensional plastic molecular models, and gain a sound background in nomenclature, functional groups, bonding, simple mechanisms, typical reactions, and infra-red spectra. (Dr. Minné)

46—2 Chemistry of Nutrition

(8262) **Prerequisite:** One year of biology, chemistry, or physics. Four prepared periods per week. This course will investigate the connection between diet and health (or disease) and the chemical basis for such connections. Such issues as, "Is sugar bad?", "How much protein and what sort is needed for a healthy diet?", and "Is a low fat diet more healthy?" will be discussed. Chemical topics will include the structure, biological functions, and reactions of carbohydrates, fats, proteins, vitamins and additives. The energetics of metabolic pathways and of "energy rich" molecules will also be discussed. (Ms. Ballard)

52—23 Advanced Placement Chemistry (T2) (a two-term commitment)

(8275) **Prerequisites:** *Chemistry 25* or *Chemistry 30* completed with distinction and a year of physics, which may be taken concurrently. Four recitation periods and one double laboratory period. The course is for students who wish to prepare for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

55—0 Honors Chemistry—Advanced Placement

(8280) **Prerequisite:** One year of physics. Three periods for recitation and two double labora-

tory periods. This course is open to a limited number of able students, by invitation, who have strong scholastic records in mathematics and physics. No prior course in chemistry is expected. It is essentially the equivalent of a first-year college course, and prepares students for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

Physics

20—0 Physics Honors for Juniors

(8300) Four prepared class periods. **Co-requisite:** Registration in *Math 19* or *Math 20*. This is an

honors course for talented Juniors with a strong interest and background in science and mathematics. Students entering this course should have *mastered* a year of algebra as it is used profusely in solving word problems. There is laboratory work. Successful completion of this course prepares students for *Physics 55*.

25—0 Introduction to Physics

(8310) Five class periods, one unprepared. Open primarily to Lower Middlers. An introductory course in the basic concepts of physics. A less rigorous course than *Physics 30*, it is designed for students with latent mathematical maturity. Students should have completed one year of algebra before enrolling. Successful completion of the course prepares the student for the College Board Achievement Test in Physics.

30—0 Physics, A Survey

(8320) Five class periods. **Co-requisite:** registration in at least *Mathematics 32* or its equivalent. A non-calculus physics course for students with ability in mathematics and science. It includes a study of classical mechanics, wave motion, heat, kinetic molecular theory, relativity, geometrical and physical optics, and atomic and nuclear physics, as time permits. Laboratory work is an integral part of the course.

32—1 Physics, A Survey

(8331) This course covers the same material as the

32—3 first trimester of *Physics 30-0*. ALL students (other than Seniors) who enroll in this course during the *Spring Trimester* MUST

also enroll in *Physics 35-12 (T2)* during the following Fall and Winter (see below).

35—12 Physics, A Survey (T2) (a two-term commitment)

(8354) **Prerequisite:** *Physics 32-3*. This course covers

the same material as the Winter and Spring trimesters of the yearlong course, *Physics 30-0*.

36—3 Electricity, Magnetism and Electronics

(8363) A five-hour course, four prepared, with laboratory work taking place during the regularly scheduled hours. The course will include static electricity and certain static electrical phenomena such as lightning. Current electricity, simple circuits, magnetism, magnetic effects and some basic concepts of electronics will be included. Lasers, and photodetectors will be discussed if time permits.

52—12 Advanced Placement Physics (T2) (a two-term commitment)

(8374) Five class periods. **Prerequisite:** An honor grade in *Physics 30* or its equivalent and enrollment in at least *Math 51* or its equivalent. This is a rigorous course in mechanics (Fall Term) and electro-statics and dynamics (Winter Term). Calculus will be used as required. This course generally prepares candidates for the C-level Advanced Placement Examination in Physics and entrance to honor level programs in physics at the university level. Text: *Physics*, by Resnick and Halliday.

55—0 Honors Physics — Advanced Placement

(8380) Four prepared class periods and one double laboratory period. Open to talented students who will be enrolled in at least *Math 51*, may have taken a chemistry course and need not have taken any previous physics. If you are interested in this course, you may sign up for it with your academic advisor in the spring or you may request it on your course registration form. The Department Chairperson will then review your credentials and invite you to join the course or suggest you enroll in *Physics 30*. *Physics 55* prepares students for the C-level Advanced Placement Examination and is a rigorous course emphasizing mechanics and electrostatics and dynamics. Text: *Physics* by Resnick and Halliday.

60—3 Relativity and Quantum Mechanics

(8393) **Prerequisites:** *Physics 30* or *35* and *Math 52*. Four prepared class periods. Relativity and Quantum Mechanics are two theories that completely revolutionized man's thinking about the universe. The course is a survey of the basic ideas underlying these theories. Special mathematical techniques needed for a better understanding of the material are developed in the course.

Theatre and Dance

All courses are electives, open to the various classes as noted. Courses in theatre are designed for students who wish formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work in productions. A variety of experiences is available: some courses result in performance; some courses study theory; some do both. Theatre students are encouraged, though not required, to supplement their classwork by participating in any of the numerous productions mounted each year, or they might be invited to join the Andover Touring Company, which has produced and toured with *Our Town*, *The Fantasticks*, *Scenes from American Life*, *A Thurber Carnival*, *Godspell*, *The Contrast*, *J.B.*, and *The Skin of Our Teeth*.

THEATRE COURSES

21-1 Introduction to Acting

- (6511) Four class periods and one hour of movement. Open to all classes. This course is designed for students with little or no acting experience. By doing exercises in movement and voice production, reading, improvisation, and scenes, a student who is curious

about the theatre may determine whether he or she has ability or interest in acting, while learning something of the process of characterization, the major responsibility of the actor. The emphasis is on the variety of acting experiences rather than on a polished final product. One required trip to a nearby theatre. Text: Hagen, *Respect for Acting*.

22-1 Public Speaking

- (6521) Four class periods. Not open to Juniors. The course has a dual objective: to learn how to speak easily in front of others, and to learn how to speak English well. Students give prepared and extemporaneous speeches on a variety of topics while studying diction,

pronunciation, projection, organization, and other techniques of good speaking.

26-13 Technical Theatre

- (6561) Two double periods. Open to all classes.
(6563) Through practical experience in designing, building, and lighting for plays currently be-

ing produced, students learn the elements of stagecraft, including set construction, stage rigging, and the use of lighting instruments and gels. For the Fall Trimester emphasis will be on stagecraft; for the Spring, lighting.

32-2 Intermediate Acting

- (6622) Four class periods. Prerequisite: Theatre 21, or departmental permission. Building upon the principles of acting introduced in Theatre 21, this intermediate acting course consists

of detailed scene work and improvisation, exploring the relationship of the actor to his audience and to his fellow actors and focusing on the creation of dramatic moments, both with and without scripts. The course considers various acting styles, in an effort to guide the actor toward a greater understanding of his responsibility on stage: to see to what degree he can remove himself from himself while creating truthful characterizations.

51-1 Acting and Directing Workshop

- (6711) Two double periods. Prerequisite: Theatre 21 or 32, or departmental permission. Uppers

and Seniors only. The course serves two kinds of students: those who wish as actors to study plays and characters in greater depth and those who wish to study the principles and techniques of directing, the most complex of theatrical tasks. While everyone will do some acting, only those people who express a desire to experiment with directing will do so. Class members work with manageable scenes from classical and contemporary periods, reading theories of acting and directing, studying various performance styles, and examining methods of scene interpretation.

52-123 Play Production

- (6721) Four double periods. By audition. This course is oriented toward the performance of a significant work by an important playwright. Recent choices have been *The Sea*

Gull, *The Little Foxes*, *Macbeth*, *As You Like It*, *The Hostage*, *Hamlet*, and *Ten Little Indians*.

53-2 Playwriting

- (6732) Four class periods. Open to Uppers and Seniors. Each student is expected to write at

least one one-act play in addition to certain exercises in monologue, dialogue, and scene setting. The class reads aloud from students' work-in-progress while studying the formal elements in plays by important playwrights and by reading selected literary criticism focused on drama.

DANCE

25—123 Introduction to Dance

(6801) Four prepared class periods. Open to all
(6802) classes. A formal course in movement and
(6803) composition which introduces the serious
student to the vocabulary and other elements of dance through active participation. The emphasis is not ultimately on public performance, but on the process and the discipline of modern dance. (Ms. Brecher)

Phillips Academy
Andover, Massachusetts 01810



ANDOVER

Catalog 1986-87

The material in this catalog is intended to provide general information concerning Phillips Academy, Andover, rather than a complete record of any one year. It is not in any manner contractually binding, and the information herein is subject to revision and change.

Cover: Students are seated on the Armillary Sphere, designed by Paul Manship, 1928. The sphere depicts the elements of the universe—earth, air, fire and water—and the hope of that universe, the human family. The child in the family group recalls the premise in Andover's charter, "Youth is the important period, on the improvement or neglect of which depend the most important consequences to individuals themselves and the community."

Andover

Catalog



Published by Phillips Academy Andover, Massachusetts 01810



Phillips Academy,
Andover, Massachusetts,
better known as Andover,
is an independent,
coeducational, integrated
and non-sectarian
institution offering a
variety of academic
programs for high school
students.

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Introduction to Andover



Phillips Academy in 1778

In 1789 the first scholarship monies are recorded, from John Phillips, "in consideration of further promoting the virtuous and pious education of Youth, (poor children of genius and of serious disposition especially) in Phillips Academy, founded in Andover, Massachusetts." Today, approximately 38% of the student body benefits from financial aid in the form of outright grants or loans; Andover has been able to implement an aid-blind admission policy for the last two years, ensuring a broad diversity within the student body.

When Lu Jianghong arrived on the Andover campus last September, she entered an unfamiliar world. She had traveled for two days to attend a school which she had never seen. A twelfth grade student, she had never before ventured beyond her home province of Manchuria in the People's Republic of China. She and her parents, professors at the Harbin Institute of Technology, were anxious to have her experience the West and obtain a type of education unavailable at home. She applied to a special exchange program between the Institute and Andover, and was one of three top students accepted to travel to the United States to study at Phillips Academy for one year.

Jianghong was not alone in finding Andover very different from her home. She and her two classmates from Harbin became part of a student body of over 1200 young men and women, either returning to school or beginning a new chapter in their educations. They joined students from Guatemala, New York, and Lawrence, Massachusetts, who all found themselves a little scared, and very excited.

Jianghong was undoubtedly aware of the eclectic mix of her peers at her new school. What she may not have known was that in encouraging her to consider Andover, the Academy was fulfilling a mission which is well over two hundred years old. Since 1778, when Samuel Phillips, a gunpowder manufacturer for General Washington's army founded an academy to be "ever equally open to youth, of requisite qualifications, from every quarter," Andover's goal has been to gather young people from a broad range of experiences and provide them with the tools for a life of leadership and service.

The school Jianghong attends is very different from that of her Andover predecessors in the 18th century: the first class consisted of thirteen pupils from surrounding villages meeting in a rough shed. Today students come from over 28 countries and virtually all of the 50 states and territories to a campus of over 500 acres, where extraordinary modern facilities mix with school buildings more than one-hundred-fifty years old. Andover today enjoys two heritages: in 1973 Phillips Academy merged with neighboring Abbot Academy (est. 1829), one of the nation's oldest and most distinguished schools for young women. Now, part of the Abbot campus makes up one of six

clusters—residential “schools within a school” of approximately 200 students each, designed to provide a smaller, more intimate social community within the larger context of the whole school.

Jianghong came to Andover on a full scholarship. “Youth from every quarter” still means not only talented young people from a variety of geographic, racial and religious backgrounds, but also students from a wide range of economic situations. This year, as in the past, Andover was able to admit all new students without reference to their ability to pay the tuition. Through a strong program of grants and loans, awarded according to need, Andover may invite students exclusively on the basis of talent. Students who come to Andover bring to this campus not only academic ability, but also artistic, athletic, and creative strength. Over two thousand young people gather at Andover every year: in addition to the twelve hundred who attend the traditional school term for periods of up to four years, some eight hundred more spend the summer with us in the Andover Summer Session or various programs and institutes under its umbrella.

Andover is a residential school offering a twenty-four-hour learning experience. Young people in this community learn almost as much from peers as from teachers, particularly in a setting where there is no disjuncture between classroom and the outside, between school and home. Teachers at Andover are strong personalities, talented individuals of energy and well-considered values—instructors who work in the classroom, on the playing field, and in the dormitory. They approach students as whole people with real opinions, struggles, joys and concerns. The faculty in this community not only teach scholarship, they live it. An English teacher may be a professional photographer, a house counselor may use his evenings to finish his second off-Broadway play, and a field hockey coach may also be a highly regarded biogenetic research scientist. Like the students, Andover teachers bring to this school a broad range of talent to offer the community.

Students come to Andover at a particularly significant time in their lives. What we expect from them is much like what Eliphalet Pearson expected from his students in 1778: a willingness to share their experience, to use their talents, and to be open to consideration of new ideas. Whether from Bangkok or Boston, young people must have the resources to establish their own success, refine their goals and visions of the future and build the courage to lead in a world where communications have made the world more accessible and international issues more acute. One of the reasons that Andover sought a formal exchange with the People's Republic of China is our commitment to creating a community in which

people from different cultures can develop a common understanding; where young people at a critical time of decision-making can learn firsthand, through programs Andover offers, about what it is like to live in Senegal or work in Washington, D.C.

When Jianghong leaves Andover she will enter an American university. Wherever she goes, she will carry with her a set of experiences unique to having studied at Andover. For her, and for all young people who join our community, we want that experience to have been a challenging, constructive and joyful time in their lives.



Headmaster Donald W. McNemar



Andover Life

A Beginning



In 1782 Paul Revere was commissioned to make the Phillips Academy seal. Revere engraved the educational faith of Andover's founders—"The end depends upon the beginning"—around the symbols of the rising sun and the hive of industrious bees. The founders' religious and patriotic commitment to the common good is symbolized by the second motto, "*Non Sibi*"—"not for one's self."

A Purpose

If you come to Andover today, you will not have to go far to see a building designed by Charles Bulfinch or named for Nathan Hale. You might take computer graphics in a modern arts and communications center, discuss African history in an archaeology museum, or study the War of 1812 in a building constructed before it took place. Your roommate might be from Brazil or Tennessee. You might learn how to play squash, how to be a DJ in a radio station or how to run rapids in a kayak. In any case, you will be expected to make the most of who you are. Andover students benefit from a careful combination of independence and support. There are no formal study halls; there are no "lights out." You alone are responsible for what you accomplish, but there are many people who will help you. Teachers in a residential setting are close by, either to chat or to review the math problem you did not understand in class. Professional study counselors stand ready to help you manage your time and give you advice on how to polish the term paper due next week. Your house counselor will be there to feed you when you're hungry, encourage you on your cycling, or teach you how he or she mastered irregular French verbs. The opportunities and support are here for students who demonstrate a strong sense of responsibility and independence.

Phillips Academy is committed to providing a rigorous education to qualified and promising students from a wide range of ethnic, economic, and geographic backgrounds. Andover's education reaches beyond a rigorous curriculum in intellectual and artistic disciplines; although academics remain the first priority, the faculty strive to enhance the whole student. The school believes that young people deserve a diversified program in competitive athletics and physical education to foster agility, endurance, resilience and sportsmanship; that students must be made aware of issues surrounding physical and emotional health; that the entire community must have the opportunity to flourish spiritually



The Abbot Bazaar, begun in May of 1920 at Abbot Academy to celebrate the original opening of the school, continues today as an annual outdoor carnival and rite of spring for Andover students. The Bazaar includes a dunking booth (traditionally occupied by the Headmaster), facepainting, tag sales, and picnicking.



through the exercise of religious beliefs; and that students should be encouraged to involve themselves in the larger community to develop responsibility and social concern. Through all of these means, Andover's goal is to challenge young people to use these resources innovatively, and to develop the qualities and skills necessary for sound leadership.

The school is designed to encourage both young women and young men to develop such qualities. Through the curriculum, athletics, and student leadership, Andover's commitment to coeducation continues to evolve, changing to meet the needs of all young people. In the winter of 1986, the Board of Trustees published the results of a two-year interdisciplinary study on coeducation at Andover. Initiated at the tenth anniversary of the merger between Abbot and Phillips Academies, the study is a compilation of historical trends and community attitudes with regard to many gender issues on campus. With regard to course content, teaching style, athletics and residential settings, the study generated both praise for our progress, and an agenda for the immediate future to fully serve the 1200 students under our care.

The Place

The school is located on a hilltop in the town of Andover, a 35-minute bus ride from Boston and Cambridge. It is well situated for easy access not only to the historical, cultural and entertainment offerings of the Greater Boston area, but to the beaches and mountains for which northern New England is justly renowned.

Phillips Academy was the first boarding school to be incorporated in the United States (1780). During its more than two centuries the school has grown in size from a single rude building and a few acres of land to an extended campus of 160 buildings on over 500 acres.



The People

Students

There are approximately twelve hundred young men (55%) and women (45%) in Andover's regular session, of whom about one-fifth are day students. More than eight hundred others attend the various programs and institutes of the Academy's Summer Session.

Andover students are divided into four classes: Seniors, Upper Middlers, Lower Middlers and Juniors—our traditional terms for 12th, 11th, 10th and 9th graders. Some are here for four years, most for a shorter time, but they all have two things in common: intelligence and the willingness to use it.

Faculty

The faculty number approximately two hundred; two-thirds hold advanced degrees at the master's or doctorate level. Andover teachers teach not only in the classroom, but on the field, in the dormitory, and through numerous extracurricular clubs and activities as well. They demand as much of themselves as of their students: among a myriad of responsibilities to the school, the faculty find time to be authors, research scientists, photographers, prize-winning poets, theological scholars, and professional musicians.



The Work

If you come to Andover, you have the ability to accomplish all that is expected of you academically, but come prepared to work hard. For every hour spent in class, students here are expected to complete approximately one hour to an hour-and-a-quarter of preparation. Students at Andover must complete a required core of studies which the faculty feels is essential to a liberal education. This includes three years of language; a full year of a physical science with laboratory; three years of mathematics; a year of United States history with a required additional term of elective history; a term each of music, visual studies, religion/philosophy and physical education; one year of English competence and one year of general literature. Requirements for a diploma vary according to the level at which a student enters the curriculum, and are described fully in the *Andover Course of Study*. Beyond this framework, students choose their own courses with the guidance of an academic advisor. The school encourages all students to construct a curriculum which reflects breadth, depth and balance, and to take advantage of the hundreds of elective courses available.

A year, a week, a day

Andover operates on a trimester system, offering about 285 separate courses that vary in length from one trimester to the full year. The year begins in late September and ends in mid-June, with breaks at Thanksgiving, Christmas and in the early spring.

Classes are held on Monday, Tuesday, Thursday, and Friday, the full class days, and on Wednesday morning and every other Saturday morning.

Wednesdays and Saturdays are half study days with no afternoon academic appointments. On alternate Saturdays there usually are no morning classes and Sunday is totally free. This flexible weekly schedule provides time for independent study, for special projects, for informal as well as regularly scheduled sports, shopping in Andover, or occasional trips to Boston. Social events during the week are limited by the demands of the academic program, but the weekend program on campus includes dances, concerts, movies, plays and informal activities.

Participation in athletics is required of all students, and athletics and activities are scheduled four afternoons a week for two hours each. On Wednesday and Saturday afternoons, varsity and junior varsity teams participate in interscholastic competition.

Meals are served in Commons, our fifty-year-old central dining hall, composed of four handsome, traditional dining halls and four completely modern serving areas. The cost of meals is included in the fees of both boarding and day students.

The Daily Schedule

- 7:15 a.m. Commons opens for breakfast
- 8:00 a.m. Five, 50-minute morning class periods. A student is likely to have four morning classes, each meeting four or five times a week.
- 11:00 a.m.–
- 1:30 p.m. Lunch at Commons
- 1:45 p.m.–
- 3:45 p.m. Sports
- 4:10 p.m.– Two afternoon class periods: most students have
- 6:10 p.m. one afternoon class.
- 5:15 p.m. Commons opens for supper.
- 6:45 p.m. Evening activities: Chorus rehearsal, Drama Lab plays, club meetings, etc.
- 8:00 p.m. Evening study begins
- 10:00 p.m. Students in own dorm

An individual student is likely to have one morning period and one afternoon period free each day, depending on course and laboratory schedule.

Most students are eligible to take a day excuse each week and, after the first two weeks of the year, overnight excuses beginning after their last scheduled weekly appointment.

Course work is intensive and involves about twenty-five hours of outside preparation each week. Required athletics or afternoon activities total approximately six hours each week. In addition, all students are required to participate in the school's work program, performing assigned tasks, supervision or leadership responsibilities two hours each week. Despite the amount of time that must be spent on academic pursuits, most students become very involved in extracurricular activities and social events. The school encourages independence and personal responsibility: there are study hours but no study halls, and decisions about the use of one's time are largely left to the judgment of the individual.



Residential Life



On any given weekend, social events on campus could include at least one dance, a movie, coffeehouse or concert, and a theatre production in the Drama Lab. The Del Fuegos (above), called by *Rolling Stone* magazine one of its "New Artists of the Year" in 1985, performed at Andover last spring. They are Woody Geissmann, Tom Lloyd '79, Dan Zanes '79, and Warren Zanes '83.

Dorms and Clusters

Boarding students live in dormitories with faculty house counselors and their families. Although these buildings vary in size and house from four to twenty-four students, all are small enough to encourage close relationships among students and between students and house counselor. One-third of the students live in single rooms; two-thirds in large double rooms. The larger dorms are likely to have students from at least three classes.

For many students, dormitory life is one of the most valuable aspects of their time at Andover. Whether it's planning a pancake breakfast or studying for a history mid-term, sharing it with people from very different backgrounds or from foreign lands is a rewarding learning experience.

Dormitories are grouped into six geographical units called "clusters," each including girls' and boys' dorms, about two hundred students from all classes, and twenty to thirty faculty families. Clusters create the personal atmosphere of a small community in which everyone knows everyone else and people do most or many things together. The cluster system is the heart of Andover's residential life, bringing the advantages of a small school to an institution that already has the advantages of size.





The clusters have considerable autonomy; teachers and students together manage their own affairs under the leadership and supervision of a cluster dean, who works closely with the Dean of Residence. Each cluster has its own academic counseling, student officers, discipline system, intramural athletics and informal social activities.

A faculty member is responsible for administering the student work program, which is designed not only to develop a sense of community responsibility for the daily operation of the school, but also to help the school reduce its operating costs. Working two periods a week, all students share the jobs of cleaning the dormitories, returning books to library stacks, serving as office helpers and laboratory assistants, and performing other essential tasks. In addition, all residents of a given dormitory are responsible for keeping its entries free of litter, snow and ice.

The clusters take turns each week working in the dining hall, seniors serving as overseers. Seniors have many other supervisory roles, including cluster and school offices, editorial boards of student publications, club leadership, and other assignments serving the Phillips Academy community.

Counseling and Discipline

Those who are not accustomed to a residential school may at first be surprised by the degree of independence an Andover student is given. Along with that freedom come rules and procedures necessary to protect the rights of individuals and to enable the school to achieve its ends. Existing rules have a dual purpose: to preserve the necessary order in the community so that effective learning can take place, and to teach students that individual freedom can be achieved only through due consideration for others. Incoming students and their parents are provided with a copy of the *Academy Blue Book*, summarizing rules and regulations; all students are held responsible for its contents.

The resident house counselor is the faculty member most directly responsible for the students in a dormitory, working with them on both a personal and academic level. Parents can expect to hear from the counselor at regular intervals and are encouraged to turn to this faculty member for information about a student's progress.



Each cluster dean supplements the work of the house counselor and is available to students and parents for information and advice. Other support staff include academic advisors, who help students in the cluster plan their academic programs, and the College Counseling Office, which assists all seniors with their future educational plans.

Graham House serves the community in several ways. The staff offers psychological counseling, study counseling, study skills courses, student tutorial services, the Psychology Department curriculum, consultation to faculty and staff, and specialized workshops in response to residential needs.

Discipline is handled at the cluster level and involves the cluster dean, house counselor, other faculty and student representatives. Offenses involving a student's integrity, social offenses that threaten the well-being of other individuals or the school community, and continued infractions that indicate an unwillingness to come to terms with the demands of the school—all render a student liable to dismissal. Cluster recommendations for suspension or dismissal are made to the headmaster, who makes the final decision. Examples are dishonesty, the possession or use of alcoholic beverages or illegal drugs, and unauthorized absence from school bounds. Students may not possess, rent or drive any motor vehicle within school bounds; bicycles are permitted. Andover does not allow smoking, unless students have completed a school administered course on the health hazards involved and have parental permission.

In a community such as Andover, all must commit themselves to the goals of the community and to loyalty to each other. Since education at Phillips Academy is both intellectual and humane, students and faculty derive mutual support from sharing of themselves and their ideals.

Trust and responsibility have many interpretations; these words have become hackneyed from overuse and misunderstanding. But the ideas they embody—sensitivity to others, willingness to explore and respect differing points of view, charity and humility in expressing judgment, readiness to cherish friendship, to depend and to be depended upon—are nonetheless fundamental. Such values can scarcely be legislated and can only be imperfectly defined. Yet the health and happiness of everyone in the community depend on consideration and awareness, restraint and candor, discretion and shared joy. Collaboration toward these imprecise but worthwhile ends is an expectation which all at the Academy hold.

Only boys and girls who feel that they can live happily with the rules and guidelines of Phillips Academy should apply for admission.



In the early 1930's Abbot alumnae parents tried to persuade Principal Bertha Bailey to abandon the required long black stocking worn with the girls' gym bloomers. To this request she steadfastly refused: "I don't like legs."



Harriet Beecher Stowe, author of *Uncle Tom's Cabin*, and her husband, a Seminary professor, lived in Stowe House. She is buried in the school cemetery. Mrs. Stowe, who shocked the strict Congregationalist community by giving parties and entertainments for students, was suspected of going to the theater and even of having "Episcopalian leanings."

Claude M. Fuess, *An Old New England School*

The Campus Ministry

Reflective of a diverse student body, the religious ministry at Phillips Academy is also diverse. Priest, minister, and rabbi serve the ongoing liturgical and celebrative needs of the Roman Catholic, Protestant, and Jewish students on campus; the chaplains also teach, counsel, and help organize a variety of community service and social action projects for the entire campus. To meet the needs of students from other spiritual traditions, opportunities are provided for reflection, meditation, and fellowship in a variety of settings.

Activities

Extracurricular activities are an important aspect of a student's education, and Andover offers a rich fare, thanks to the diversity of interests in the student body. From the Chess Club to the Computer Club, it seems that all Andover students do something special in their free time.

Many of the activities are service-oriented; the Community Service Program places student volunteers in area nursing homes, elementary schools, a youth center and other agencies. Closer to home, the Tour Guide Association handles the responsibility of conducting campus tours for the Admission Office. Older students who are members of the Tutorial Program offer help to fellow students in academic difficulty. The student radio station, WPAA (91.7 FM), is on the air from 6:30 a.m. to 11:30 p.m. daily, serving the local listening area as well as the student body. *The Phillipian*, the Academy's prizewinning, student-run weekly newspaper, is wholly uncensored; students lay out the paper and do their own typesetting, as well as write the articles and headlines. The *Pot Pourri*, the school yearbook, and the school literary magazine, *The Mirror* (Robert Frost was an early contributor), provide more opportunities for those with a literary bent.

Cultural organizations include the Afro-Latino-American Society, the Asian Cultural Society and others; course-related groups range from the Astronomy Club to the German Club. The Chapel Fellowship, the Newman Club and the Jewish Student Union support the ecumenical ministry in providing active religious communities for Andover students.

At any time during the week, actors and directors will be working on a main stage play or on a student production in the Drama Lab; the Andover Political Economy Club may be listening to a State Department official discuss the Middle East; the Natural History Club may be bird watching on an ocean beach or—if the season is right—the Ski Club may be on its way to the White Mountains of New Hampshire.

Many students make extensive use of school facilities in their free time, whether or not they are affiliated with a club or organization. The Arts Center is a major focus of school life—darkrooms are used almost around the clock, and students and faculty interested in painting, metal sculpture, ceramics or design make use of the center's studios and workshops in their free time. The Music Department also provides facilities for students interested in pursuing music beyond the classroom.

There is no limit to the variety of extracurricular activities at Andover. Students who do not find an existing club or organization that meets their needs are encouraged to start one.

Undergraduate Organizations (Clubs)

Afro-Latino-American Society
 All That Jazz (vocal jazz group)
 Amateur Radio Club/W1SW
Andover Forum (current events publication)
 Asian Society
 Astronomy Club
 Beatles Fan Club
 Blue Key Society
 Bridge Club
 Cercle Francais
 Chapel Fellowship
 Chess Club
 Chorus
 Community Service
 Computer Club
 Cyclocross Club
 Dance Club
 Equestrian Club
 8 'n 1 Club (singing group)
 Fidelio Society (madrigal singing society)
 German Club
 The Heartland Coalition
 Just Ordinary Komediens Everywhere
 Jewish Student Union
 The Leaky Pen (satire club, with publication)
The Mirror (literary magazine)
 Model United Nations Club

Mohgul Society (Indian Society)
 Natural History Club
 Newman Club
 North Carolina Club
 Nuclear Awareness/Education Club
The Phillipian (student newspaper)
 Philomathean Society (debating society)
 The Photography Club
 Political Economy Club
Pot Pourri (yearbook)
 Press Club
 Scuba Club
 Ski Club
 Strategic Gamers Guild
 Tertulia (Spanish club)
 WPAA (student radio station)





Educational Resources

The Oliver Wendell Holmes Library

At the center of Andover's intellectual life is the 102,000-volume Oliver Wendell Holmes Library, named after the famous doctor and poet who was a member of the Class of 1825. The stacks are open to students. In addition to academic work, students and teachers use the library to explore new fields of interest and to read casually.

The library subscribes to over 260 American and foreign periodicals and daily papers from cities throughout the country. A microfilm file of *The New York Times* is available. Particular library treasures are the Jansson Atlas, printed in Amsterdam in 1657, papers and books of Oliver Wendell Holmes, and one of the world's leading collections of Vergiliana.

The Addison Gallery

The Addison Gallery of American Art operates both as a museum in the traditional sense and as an art center for the school and the community. In addition to organizing exhibits of American art from the collection, the museum staff originates exhibits of contemporary painting, sculpture, photography, video, film and crafts. Seminars bring artists in close contact with students to discuss contemporary art issues. In cooperation with Phillips Academy's Music Department, concerts by faculty and students are produced in the museum.

The holdings of the museum are recognized as a distinguished specialized collection: Allston, Copley, Morse, Stuart, West and others represent the Colonial period. Of special importance among the many paintings of the nineteenth century are examples by Cole, Doughty, Eakins, Homer, Inness, LeFarge, Ryder, Twachtman and Whistler. The early part of the present century is shown in the work of Bellows, Davies, Demuth, Hassam, Hopper, Luks, Marin, Prendergast and Sloan. Contemporary artists are represented by works of Calder, Lippold, Moholy-Nagy, Hofmann, O'Keeffe, Pollack, Shahn, Wyeth and others.



Sidney Smith, class of 1985, as the President of the Afro-Latino-American Society on campus helped to found NEALSA, the New England Afro-Latino Student Alliance, an organization to promote communication and interaction among students of color at independent schools. NEALSA continues today with many social events among member schools and an annual conference.



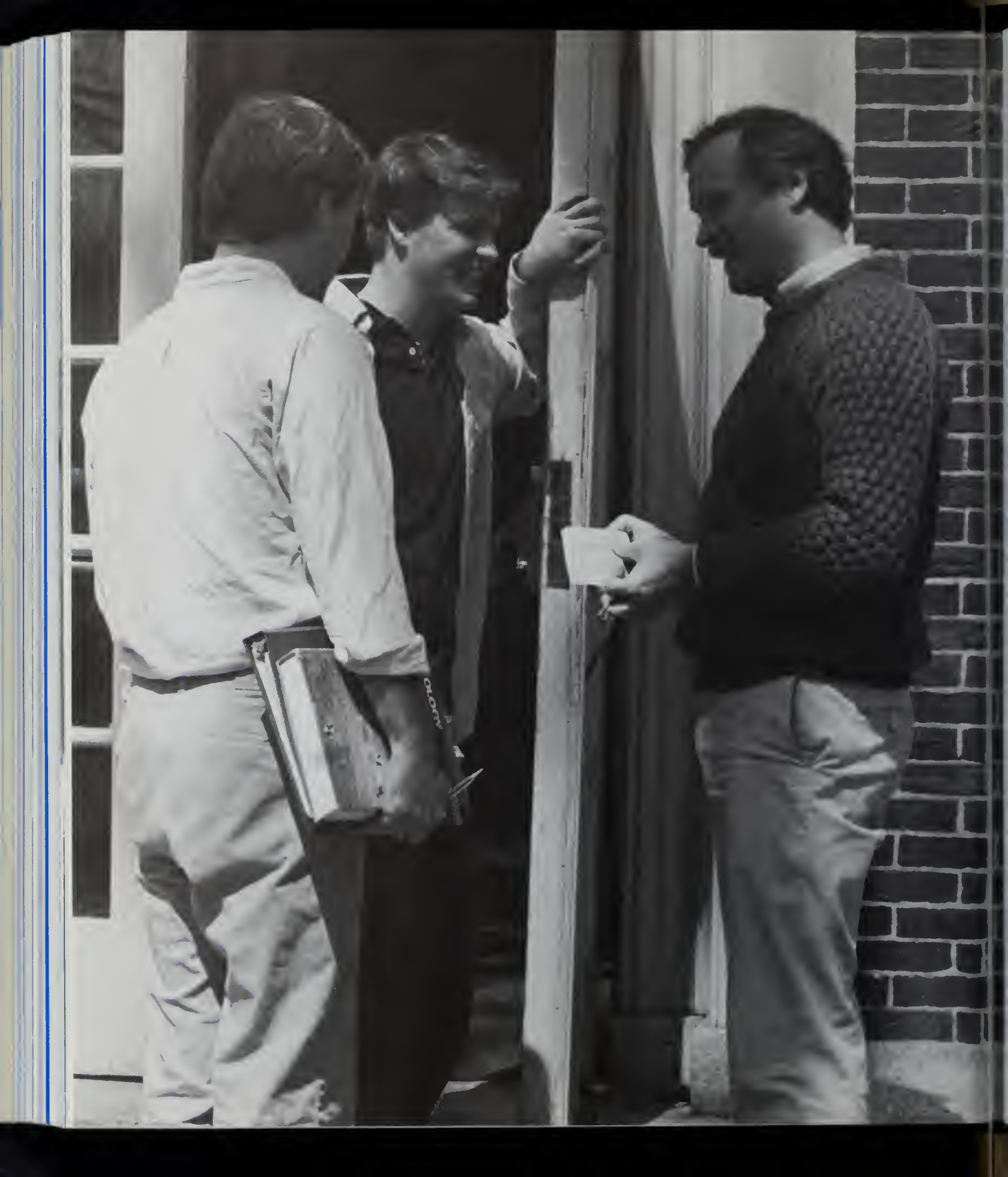
The Robert S. Peabody Archaeology Museum

The Robert S. Peabody Foundation for Archaeology has conducted major archaeology research in this hemisphere for the last seventy-five years and has published many reports of its scientific investigations. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas. The laboratories of the museum are used in teaching and illustrating the Foundation's research. Mature students may undertake special study projects which involve the use of the Foundation's collections and library resources.

The Cochran Sanctuary

The Moncrieff Cochran Sanctuary is a sixty-five-acre tract of rare beauty located so close to the center of school activity that it is in fact an extension of the campus. Landscaped areas planted with dogwood, azalea, rhododendron and laurel provide a succession of bloom that draws many visitors from late April to mid-June. A brook and two ponds attract nesting ducks and geese, and extensive natural wild areas, varied in terrain and plant life, provide nesting places for many species of land birds. Cross-country runners and skiers make extensive use of the Sanctuary, as does the Academy's Search and Rescue program.





The Academic Departments

The Curriculum

The curriculum of Phillips Academy contains both a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical. All departments offer courses beyond the level of preparation for college.

Classroom groups are small enough to permit individual attention; the average class size is fourteen. Students are placed in sections fitted to their attainment and, through accelerated sequences and advanced courses, are encouraged to progress at a rate commensurate with their ability and ambition. Many students fulfill requirements ahead of the normal year, increasing their choice of college-level courses and other elective opportunities. Andover's trimester system provides flexibility and variety in the curriculum and allows various combinations of independent work and off-campus projects.

Every student is assigned to an academic advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements and the student's particular interests. With the approval of the academic advisors and house counselors, students may request their instructors and sections. However, the school cannot guarantee that students will be able to have their desired selections.

The curriculum and diploma requirements are described in detail in the *Course of Study*, which will be sent upon request to each preliminary applicant and to others who would like to receive it.

THE ARTS



During his second and third years at Andover, Jack Lemmon's grades were suffering due to his overpreoccupation with theatrics and composing. Though things looked very bleak in his senior year, he applied himself diligently and made what he thought was an astounding reversal. Against all odds he was able to graduate. When Headmaster Claude Fuess handed the proud young Lemmon his diploma, he said, "A remarkable change. I'm truly impressed, Bill."

Visual Arts

At the heart of the art program is a concern that all students learn to see freshly and accurately, that they learn how to organize their efforts to make something happen, that they develop a critical eye for the coherence of their environment, all these with an independent mind.

The diploma requirement in art is as follows: Juniors and new Lower Middlers must take a trimester course in studio art; an entering Upper Middler must take a trimester course in studio art or music. Andover attempts to balance structured, problem-solving courses like the basic Visual Studies, with more adventurous advanced courses, organized around longer-term projects. For a student who desires several terms in art or design, the courses are here, whether the student's objective is a professional school, Advanced Placement in a liberal arts college, or simply a strong basis in a traditional area of general education.

The superb facilities of the Arts and Communications Center—fully equipped wood and metal shops, two complete photo labs, print-making equipment, painting and drawing studios, a kinetics studio, computer graphics labs, video studio—are supplemented by the several kilns available to ceramicists. The department welcomes extracurricular use as well as work related to courses, and faculty members are on hand every evening to encourage the idea that whether it's painting or computer graphics, the Arts Center is the place to go.

Theatre and Dance

Courses in theatre are designed for students who seek formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work on plays. A variety of experience is available; some courses are performance oriented; some are theory oriented; some are both. All combine classroom and workshop sessions; students work out practical theatrical problems together under the guidance of an instructor. Drama, as well as dance, both modern and ballet, may be elected as an alternative to athletics, once a year.



George Washington Hall, capable of handling audiences of one thousand, includes a flexible, professionally equipped proscenium stage. It has a full fly system, accommodation for numerous lighting instruments and an elevator/pit. Recent main stage productions have included *The Me Nobody Knows*, *Cabaret*, *The Time of Your Life*, *Twelfth Night*, *Macbeth*, *Our Town*, and *Camelot*.

The Drama Lab, also in George Washington Hall, is a "black box"—an intricate arena/workshop with excellent lighting facilities, suitable for audiences of not more than seventy-five. Although main stage plays are usually directed by a member of the faculty, the Drama Lab allows students to direct plays themselves and to experiment with dramatic styles. A sample of productions from recent years includes plays by Albee, Ionesco, and Pinter but original student work is also performed here.

Theatre students are encouraged—but not required—to supplement their classwork by participating in any of the numerous productions mounted each year.



Music

The Music Department faculty consists of five full-time and several part-time instructors. Other highly qualified instrumentalists are available to teach voice, piano, organ, classical guitar, brass, percussion, strings, and woodwinds.

Andover offers courses for the beginner as well as for intermediate and advanced students both at the applied level (study of musical instruments or playing in a musical organization) and in the history, appreciation, and theory of music.

The Nature of Music, or Music 20, is the diploma requirement in music, and a prerequisite for most courses in the history, appreciation, and theory sections. A more advanced three-part course, Theory of Music, runs in sequence throughout the year.

Graves Hall, the department's newly renovated home, has large rehearsal halls for concerts as well as many individual practice and ensemble rooms, music classrooms, teaching studios and an electronic music studio. Graves Hall also houses

the Timken Recital Hall where faculty, guest, and student recitals take place. The Department also has a large, up-to-date record library and listening room.

The Chorus has a fully equipped rehearsal room and a library of music literature in the Cochran Chapel, a short distance away. The Chapel also houses two new organs for the use of beginning and advanced organ students. One is located in Kemper Chapel; the other, in the main chapel, is a 30-stop, double manual, tracker action instrument.



VISUAL ARTS

Introductory Studio Courses

Visual Studies

Visual Studies for Juniors

Introductory Design

Introductory Ceramics

Introductory Photography

Intermediate Studio Courses

Visual Studies (Art 10) is a pre-requisite for all intermediate courses.

Drawing

Animation

Drawing and Two-Dimensional Design

Two-Dimensional Design

Three-Dimensional Design

Intermediate Photography

Advanced Studio Courses

Visual Studies (Art 10) is a pre-requisite for all advanced courses.

Graphics and Photography

Studio Photography

Painting

Filmmaking

Advanced Ceramics

Printmaking

Advanced Photography

Sculpture

Photo Illustration

Large Format Photography

Photo Journalism

Kinetics

Architecture

Contemporary Communications

Calligraphy: The Art of Lettering by Hand

Advanced Placement in Studio Art

History of Art: Painting and Sculpture

History of Art: Architecture

MUSIC

Applied

Beginning Instruments

Recorder Ensemble

Brass Ensemble

Woodwind Ensemble

String Ensemble

Fidelio Society

Band

Chorus

Chamber Orchestra

Private Instrumental and Vocal Lessons

The Nature of Music

Developing Musical Skills

Opera Seminar

History and Appreciation

Independent Study in the History and Literature of Music

Jazz

Popular Music in America

Theory

Orchestration and Conducting

Theory of Music I

Theory of Music II

Theory of Music III

Electronic Music

Advanced Techniques in Electronic Music

THEATRE AND DANCE

Theatre

Introduction to Acting

Public Speaking

Acting and Directing Workshop

Stagecraft

Play Production

Shakespearean Workshop

Playwriting

Dance

Introduction to Dance

CLASSICAL STUDIES

The chief aim of the Department of Classics is to help students rediscover the sense of order and ideals which has been the glory of the ancient world of Greece and Rome. Through its elective courses in Classical Studies, taught in English, students can survey the history and the thought of Classical Civilization and its influence and importance to their experiences in the world we face today.

CLASSICAL STUDIES

Greek Civilization
Roman Civilization
Etymology
Ancient History
Classical Mythology

ENGLISH

Convinced that level of achievement is more important than the number of years a subject is studied, the English Department has established modest but firm diploma requirements. Students must prove themselves competent in writing and reading through the English Competence course and, by taking the Literature Sequence, acquire a sense of the depth and breadth of their literary heritage. For students who enter in the 9th grade, English 10: The Journey, which is a preparation for the Literature Sequence, is also required.

Once the student has successfully completed the diploma requirements, opportunities multiply. Students may enroll in any of the Literature Sequence courses that they have not yet taken, or they may study any of the advanced or specialized courses offered by the department. Seniors may also qualify for an independent project supervised by the teacher of their choice.



ENGLISH

Introductory Courses

English 300 (for Seniors and Postgraduates)

Required Sequence Courses

English Competence (three terms)

Lit B, The Satiric View, The Tragic View or The
Mythic View (two terms)

Lit C, Shakespeare (one term)

Elective Courses

(Only courses with sufficient enrollment will be
given.)

Irish Studies

British Writers

American Writers

Introduction to Writing

Afro-American Literature

James Joyce

Man and God

20th Century Drama

Shakespeare: The Man, The Times, The Theatre,
The Plays

Satire and Comedy

Novel and Drama Seminar

Creative Writing

The Short Novel

Milton and Spenser

Chaucer and His Age

Wit and Poetry in the Seventeenth Century

Images of Women



Graceful Bulfinch Hall (1819) has been in Academy use for more than 150 years as a recitation hall, gymnasium, and dining hall and now houses Andover's English classes. Dr. Oliver Wendell Holmes, class of 1825, immortalized "the classic hall" in his poem, "The Schoolboy," written over 100 years ago for the Academy's Centennial Celebration. In 1984, Bulfinch received a full interior restoration, to reflect its original early 19th century design.

HISTORY AND THE SOCIAL SCIENCES

Courses in the Department of History and Social Sciences are based on the conviction that a well-informed citizenry is essential to the function of a republican society. Classes rarely rely on a single textbook. Instead, students work with a variety of paperbacks, monographs, library-reserve books, and films. All courses emphasize both the mastery of subject matter and the acquisition of skills that will serve the student throughout life. Close attention is given to textual reading, note-taking, and the preparation of oral and written reports

Courses for Juniors focus on the concept of historical continuity and change. They use a multi-disciplinary approach, emphasize world geography, and devote one day a week to the study of contemporary affairs. Topics studied include the Kalahari San, Darwin, Protestant and Moslem revolutions, and the industrial revolution in the Merrimack Valley. During the Lower year, American and European biography courses focus students' attention on significant individuals in history. Frederick Douglass, Lenin, and Gandhi are among those studied.

In the Upper year, most students take three terms of United States history which, together with a fourth term of non-United States history during the Senior year, satisfies the department's diploma requirement. A Senior may choose from a variety of survey courses; histories of Africa, East Asia, the Middle East, Russia, Latin America, and an Introduction to Economics are some of the offerings. In addition, Seniors who have completed the diploma requirement may take advanced seminars in topics related to United States history. Courts and Constitutional Development, a Social History of American Families, International Relations, Race Relations, and Nuclear Weapons are among the possibilities.

In the required United States history course and in several of the Senior electives, students write extensive research papers, using government documents, newspapers, letters, diaries, interviews—the raw materials of history. For qualified Uppers and Seniors, there are two programs of special interest: a student may

spend the spring term in Washington, D.C., working as an intern in a congressional office, or may join the Urban Studies Institute, which involves both course work and field work centering on the city of Lawrence.

HISTORY AND THE SOCIAL SCIENCES

Social Science

American Race Relations
History and Mathematics
International Relations
Introduction to Economics
Issues in Economics
Men, Women, and American Culture
Modern American Presidency
Nuclear Weapons

History

Africa and the World
American Biography
American Urban History
Ancient History
Continuity and Change
Courts and Constitutional Development,
1935–1985
East Asia: China, Japan, and Foreign Relations
European Biography
Latin American Studies
Modern Europe
Social History of Families in America
Social History of the Middle Ages
The Middle East
The Russian Experience
The United States
Topics in the History of Phillips Academy and
Abbot Academy
Tudor England
United States History for Foreign Students
Victorian England



MATHEMATICS

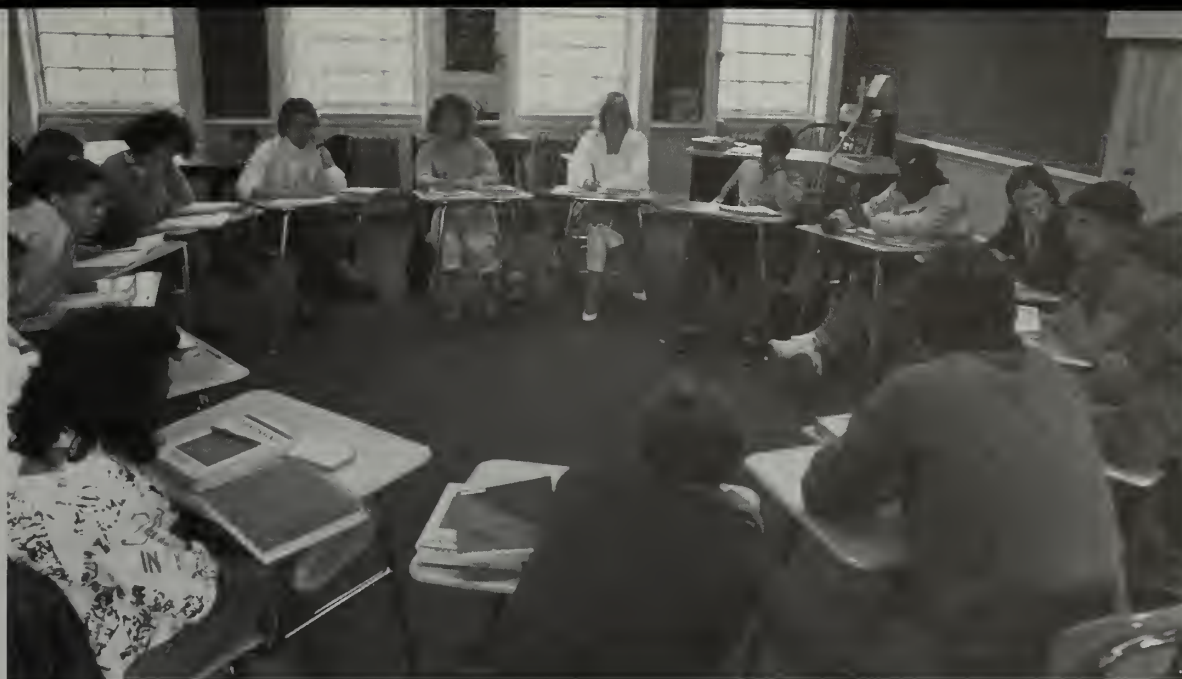
Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late twentieth century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his or her energies and curiosity to the organization of mathematical knowledge.

The mathematics curriculum is built around a core sequence of eight trimester courses, three of elementary algebra, two of geometry, one of intermediate algebra, and two of precalculus topics, completion of which will satisfy the diploma requirements. An additional trimester is required before entering calculus. Students whose previous course was elementary algebra will take *Geometry* unless our placement test indicates a need for further work in algebra first. Those who enter with one year of algebra and one year of geometry will satisfy our diploma requirements by taking intermediate algebra and the first two precalculus trimesters unless the

placement test shows a need for *Algebra Consolidation* first. The latter course prepares the students to take the precalculus courses the following year. There are a variety of special courses designed for new students who fall between the above criteria.

The department also offers many elective courses, descriptions of which may be found in the *Course of Study*. Over one-third of all mathematics is taken electively, much of it in preparation for the Advanced Placement Examination in calculus. These courses include the study of elementary and advanced calculus, analytic geometry, infinite series probability, statistics, computer science, linear algebra and vector analysis.

The Mathematics Department is located in Morse Hall, which also houses two computer rooms. One room has 19 IBM Personal Computers (networked) and the other has 12 Apple IIe computers. A variety of computer courses are offered that range from an introduction to computers to preparation for the Advanced Placement test in Computer Science. Computer languages taught include APL, LOGO, and Pascal.



The community of students who like math at Andover is sizeable. They share their curiosity and knowledge by offering to tutor other students at the school, and by participating in interscholastic competition under the aegis of the Math and Computer Clubs.

MATHEMATICS

Courses leading to satisfaction of the diploma requirement

Elementary Algebra
Algebra Review
Geometry
Algebra Consolidation
Intermediate Algebra
Precalculus
Elementary Functions

Elective Courses

Calculus
Computer Programming: beginning, intermediate and advanced
Linear Algebra and Vector Calculus
Probability
Statistics
Discrete Mathematics

FOREIGN LANGUAGES

As long ago as 200 B.C. the Latin poet Ennius used to say that because he knew three languages he had three hearts. Andover can render no finer service to today's world than to send forth its alumni with many hearts, ready and able to feel for, to understand, and to respond to the millions of people who speak languages other than English.

Acknowledging the importance of foreign languages, Andover requires for the diploma three years of an ancient or modern language. The ancient foreign languages offered are Greek and Latin, the source languages of Western thought and literature. The modern foreign languages offered are Chinese, French, German, Italian, Russian and Spanish. Emphasis is on the spoken word, and the foreign language is the basis for all communication in the classroom. Small classes make possible maximum participation, with supplementary practice provided by our versatile language laboratory. There are

opportunities to join accelerated classes which complete, for example, the work of four years in three.

At the 4th-, 5th- and 6th-year levels the study of literature may be supplemented by courses in the art, history, geography and music of the foreign country. In upper-level courses students can prepare for Advanced Placement Examinations in language and literature and qualify for advanced courses when they enroll in a college. Superior students may carry out independent projects, including apprentice teaching, under careful guidance.

At all levels of study progress in the foreign language is facilitated, and the resources of the classroom are expanded, through occasional use of communication media (periodicals, radio, etc.) and such activities as the staging of plays, the use of the school's radio station for broadcasts in foreign languages, festivals, language tables in the dining room, movies, clubs, visits by performing groups, and trips to language events in Boston and at nearby schools and universities. Students are urged to consider opportunities, sponsored by Andover or by other schools, to live and study abroad.

For Andover's School Year Abroad program, see page 44.

Chinese

Traditions in China are deep and have been unfamiliar to Western eyes and ears for centuries. In the modern world we have a shared future. Understanding and learning the Chinese language is a key to that future. Andover is one of very few secondary schools to commit itself to a fully integrated, four-year program in Mandarin Chinese.

French

Before the outbreak of the French Revolution, French was considered the universal language of the West. It was the language of diplomacy, was already flourishing as a literary medium and, because of its clarity and precision, reflected both French culture and philosophy, influencing the development of democratic institutions in the United States as well as in other countries. The

study of French rewards the student with the ability to communicate with French-speaking peoples and to appreciate the importance of order in expression, broadening his views through a growing familiarity with the rich and lively literature and civilization that the language represents.

German

German is central Europe's principal language, and knowledge of it opens up an understanding of European culture and affairs. Students may learn German to read the works of Goethe, Schiller, Lessing, Kafka, Hesse, Brecht and Grass in their original form, or to follow the arguments of Hegel and Nietzsche, or perhaps to understand more intimately the background of modern socialism and democracy in the world. Many of the most important developments in modern physics, electronics, chemistry and engineering were originally published in German, and American businesses are realizing increasingly the importance of personnel able to speak German.



Greek

Through the study of Greek, the Department of Classics offers students a feast at the banquet of the first and still most relevant literature of the Western World. Through direct experience with such men as Homer and Plato, students will discover a sense of order and ideals in the expectation that they may apply it, in turn, to the challenges they face today. Greek, as one of the languages chosen to fulfill the diploma requirement, is often elected by students as a second or even third language in conjunction with Latin or a modern language. It remains an important basic course for students with a deep interest in literature or philosophy.

Italian

The growing popularity of Italian in American schools and colleges reflects a growing awareness of the charm of the Italian language and of the rich cultural heritage which it serves. Andover's intensive course for Seniors attracts students with rich experiences in other languages, is conducted in Italian, and has the scope and pace of a course for college freshmen.

Latin

Latin—still? Yes, as futuristic nightmares and present turmoils are reawakening a search for order, perspective and ideals in the human experience, names like Cicero, Vergil, and the *pax Romana* not only symbolize great milestones in that search but also suggest habits of mind that produce enduring greatness—the same habits of mind that show up so clearly in a sentence, paragraph or entire work of Latin literature.

Through the study of Latin the Department of Classics offers students direct experience in Latin literature, both in the original and in translation,

which is rightly called the mother tongue of Western Civilization. Latin, as one of the languages frequently chosen to fulfill the diploma requirement, is also often chosen as a second or third language. It is a particularly valuable experience for students of other European languages who have an interest in doing advanced study in foreign languages.

Russian

Approximately forty percent of Russian secondary school students are learning English. A fraction of one percent of American secondary school students study Russian. For cooperation, understanding, and influence, our doctors, diplomats, scientists, and businessmen should be able to communicate with Soviet counterparts in Russian.

Since secondary school is the best place to begin, Andover has established a rich program for our beginning as well as our advanced students.

Spanish

The Spanish Department is anxious to help students discover the varied cultural heritage of the Spanish-speaking world through intensive study of the language, both spoken and written.

It seems particularly important to learn a language spoken everyday by millions of Americans across the U.S. In addition, Hispanic literature, from Cervantes to Borges, has played a vital role in world literature, as attested by the frequency with which Hispanic writers have been awarded the Nobel Prize for Literature.

Students who enter the professions will find Spanish an indispensable tool. But whatever they do, Spanish will be the key to a richer, more rewarding life.

FOREIGN LANGUAGES

Italian offers an intensive introductory course for seniors. All other languages offer introductory and intermediate courses, with opportunities for acceleration at those levels. Students are

then eligible for the following courses:

Chinese
Literature, Philosophy and
Language Review
Literature, History and Current
Events

French
Language and Review and
Contemporary French Life
Selected Readings
Village Française
French Civilization
Conversation and Phonetics
Written Expression

Literature and Film: French
Theatre
French Literature
French History
French Civilization Outside of
Europe
Québec et les Québécois
Stylistics
Advanced Placement
Contemporary Literature

German

Literature, Composition and
Conversation
Language and Literature for
Advanced Placement
Special Topics

Greek

First Year: basics of language and
culture
Accelerated First Year: two years
in one
Second Year: Xenophon, Plato,
New Testament

Third Year: Homer and Eu-
ripides
Fourth Year: Sophocles,
lyric poetry, Thucydides

Latin

First Year: basics of language and
culture
Accelerated First Year: two years
in one
Second Year: Cæsar, Ovid, Nero
Third Year: Cicero, Vergil,
Apuleius
Fourth Year: Vergil, Suetonius,
Catullus
Fifth Year: Vergil, Tacitus, Pliny,
Horace

Russian

Literature, Composition and
Conversation
Advanced Literature, Composi-
tion and Conversation
Russian Press
Literature

Special Topics

Russian History and Literature

Spanish

Second and Third Year, Ad-
vanced, with winter term in
Mexico
Spanish Language Review
Aspectos de la Cultura y Civil-
ización del Mundo Hispánico
Introduction to Literature, with
Grammar Review
Literature and Culture, with
Grammar Review
Literature for Advanced Place-
ment
Advanced Studies in Literature
Special Topics: Literature,
Sociology, Culture
Latin American Studies



PHILOSOPHY AND RELIGIOUS STUDIES

The department seeks to initiate students into three distinctive and interrelated human quests: the search for meaning, the search for justice and the search for the foundations of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting personal appropriation of the search and in developing the necessary qualities and skills for its pursuit.

The department is committed to exploring these basic human concerns with imaginative empathy and by means of dialogue and rational inquiry, so far as these may take us. It seeks to encourage growth in understanding and empathy among different cultures, traditions and social groups. Beyond this the department is not committed to any particular pattern of expression or response to the area of study. No topic, subject or pattern is excluded *a priori*. Decisions on course offerings and academic projects take into account the interests and background of the students and faculty and the potential for furthering general departmental goals.

Courses are term contained, involve four prepared class periods and are offered at various levels on the following topics:

The Biblical World View
The New Testament Perspective
Religious Discoverers
Varieties of Religious Experience
Introduction to Non-Western Religions
Introduction to Ethics
Proof and Persuasion
Responses to the Holocaust
Views of Human Nature
Law and Morality
Bioethics
Nonviolence in Theory and Practice
In Search of Meaning
Existentialism
In Search of Justice
Great Philosophers

SCIENCE

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers Andover students an introductory term-contained course in archaeology. The course deals with the prehistoric development of civilization and with archaeological theory and method. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas.

Biology

Andover provides ample opportunity to develop interest in the biological sciences. In addition to two yearlong courses in introductory biology the department offers four courses on the advanced placement level and four elementary courses which are particularly well suited to serve younger students. The introductory courses give students a general background and an understanding of some of the current trends in biology. Field trips, laboratory work, independent projects, lectures, slides, films, and video tapes are all part of the courses. Most of the laboratory work performed during the spring term is devoted to independent projects.

The term-contained advanced courses prepare students for the Advanced Placement Examination. These courses review some of the material presented in the introductory courses as well as introduce new concepts and techniques. The advanced laboratory work gives students experience with the techniques of chromatography, electrophoreses, spectrophotometry, centrifugation, statistical analysis and dissection. Computer simulations are also used on the Science Division's Apple II microcomputers.

Bird watching trips are sponsored occasionally throughout the year by the Natural History Club for interested students who may or may not be enrolled in a biology course. A small zoo, consisting of rats, mice, gerbils, and various reptiles is maintained in Evans Hall. Its population varies with student interest, the reproductive rate of the animals and the dietary needs of



the resident boa. In the basement of Evans Hall there is a superb bird collection on loan from Harvard University and an extensive shell collection is exhibited in various parts of the building.

The Evans Hall greenhouse is a refreshing place to visit during the long winter months. Students grow plants there or start potted plants for their own rooms. An environmental growth chamber is available for those interested in experimenting with photoperiodism.

Chemistry

A variety of Chemistry Department offerings are designed to suit the range of interests and abilities of the students in their study of the composition and interactions of the physical world. Three levels of yearlong courses introduce students to atomic structure, elements, chemical reactions, bonding, gases, liquids, solids, solutions, thermochemistry, kinetics, acids and bases, electrochemistry, nuclear reactions, and organic molecules. There are Advanced Placement offerings for one year or two years of study. In addition, a series of term courses are offered

in such areas as general chemistry, organic chemistry, chemistry of nutrition, environmental chemistry, chemical research, and, for ninth graders, introduction to elements and compounds.

Because chemistry is an experimental science, the observation and interpretation of chemical phenomena are central in the curriculum. Students perform laboratory experiments related to course work, observe classroom demonstrations, and study such societal issues as acid rain, the greenhouse effect, and chemical reactions in technological applications.

The department has the equipment for the usual experiments in elementary syntheses and analysis, including analytical balances, visible and infrared spectrophotometers, pH meters, and vacuum tube voltmeters. Microcomputers are conveniently located in the Roscoe E.E. Dake Computer Room in Evans Hall.

Physics and Astrophysics

The Physics Department offers several introductory courses at various levels of difficulty in order to meet the needs of Andover students. Some representative topics are mechanics, waves, heat, electromagnetism, light, and "modern physics." Laboratory work, classroom demonstrations and extensive problem solving enable students to develop both a qualitative and quantitative understanding of the concepts of physics. Also offered are courses including geology, electronics, astronomy, relativity and early quantum theory, and university-level Advanced Placement physics.

The Physics Department operates the Thornton Observatory which houses a research-grade 16-inch reflector, a 6-inch Brashear refractor and six other portable telescopes. These instruments are used in astronomy courses as well as in project work; recent projects have included such areas as solar, lunar and planetary study; astrophotography; computer simulations; and orbit analysis.

The department is well equipped with laboratory and demonstration equipment such as an air track to eliminate friction, photogates for precise timing, cathode ray oscilloscopes for a multitude of

uses, and computers for rapid data analysis, word processing or programming. These items and many more are available and used in classroom demonstrations and student laboratory work.

Past student projects have included laser transmission of information, holograms, the construction of an electronic calculator, speed of light measurements, determinations of the electronic charge and mass, interferometer measurements, and finding the gravitational constant.

PSYCHOLOGY

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strategies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained.

ARCHAEOLOGY

Archaeology

SCIENCE

Introductory Physical Science
Introduction to Biological Science
Astronomy—the Solar System
Oceanography
Ecology
Introduction to Zoology
Animal Behavior
Observational Astronomy
Cosmology—The Universe
Beyond the Solar System
Geology
Biology
Introductory Biology
Anatomy and Physiology

Chemistry

Elementary Introductory
Chemistry
Introductory Chemistry
Research in Chemistry
Elementary Organic Chemistry
Advanced Placement Chemistry
Honors Introductory Chemistry—Advanced Placement

Physics

Introductory Physics
Advanced Physics
(B-level, Advanced Placement
C-level, Advanced Placement)
Electronics
Relativity and Quantum
Mechanics



Dr. Charles Abbot, Class of 1891, a solar energy pioneer and head of the Smithsonian Institution for many years, predicted in the early 1940's that solar energy would become the primary source of power when oil and coal were depleted. In 1972 he received his last patent, for a device to convert solar energy into electricity, shortly before his 100th birthday.

PSYCHOLOGY

Introductory Psychology
Human Relations
Human Sexuality
Group Theory and Process

OTHER COURSES

INTERDISCIPLINARY

Study Skills
Efficient Reading
Language Skills

PHYSICAL EDUCATION

All Juniors and new Lower
Middlers are required to elect
one trimester of P.E. 10 in
addition to their regular
athletic commitment.
Physical Education



Complementary Programs

Andover's complementary programs combine a number of innovative ideas designed to promote better coordination between public and private education nationally. The concept behind these programs is that of multiple schools. While one school may be accepted as the "home-base" diploma-granting institution, several other institutions may be utilized as complements to this school. Thus far, the multiple schools ideas has taken form in several program models which are open to Phillips Academy students as well as students from other schools.

The Andover Summer Session

The Andover Summer Session is a short, intensive academic program in which both innovative and traditional courses are taught in only six weeks. Courses in all subjects and at all levels demand hard work—harder work than most students have ever before experienced. Besides English, modern languages, mathematics, history, and the sciences, the curriculum offers such opportunities as Play Production Workshop, Social Psychology, Great Philosophers, Law and Morality, Modern Astronomy, Archaeology, Oceanography and Marine Biology, and Economics.

Other features of the Summer Session are special courses in writing, including the nationally known "Competence in Reading and Writing" (developed at Andover); an expanded ESL Program (English as a Second Language) for foreign students who wish to achieve English fluency; a Chamber Music Program which provides a unique opportunity for able music students in all combinations of piano, strings, winds, and voice, including individual instruction, small ensemble work, orchestra, and chorus; and an intensive Studio Art program for serious students of the visual arts who wish to develop a portfolio in preparation for the Advanced Placement Examination in Studio Art.

The Summer Session makes use of all the school's facilities and is open to able boys and girls from all parts of the country and abroad. Applicants must be graduates of the 9th, 10th, 11th or 12th grades. A catalog can be obtained by writing:

Phyllis Powell, Director
The Andover Summer Session
Phillips Academy
Andover, MA 01810
Tel. 617/475-3400, ext. 170

(MS)²: Math and Science for Minority Students

The (MS)² Program—Math and Science for Minority Students—offers black, Hispanic, and American Indian students three consecutive tuition-free summers of intensive study of mathematics and science. Ninth grade boys and girls are selected on the basis of their superior ability and strong interest in mathematics and science and financial need. The goal of the (MS)² Program is to prepare minority students to compete successfully for admission to selective colleges and for careers in science, engineering and medicine. Further information can be obtained by writing:

Victor C. Young, *Director*
(MS)² Program
Phillips Academy
Andover, MA 01810
Tel. (617) 475-3400, ext. 293

Students currently enrolled at Phillips Academy's regular session are ineligible to attend the Andover Summer Session or the (MS)² Program. Students attending the Andover Summer Session or the (MS)² Program may not apply for admission to the Academy's regular session for a full calendar year.



Randy Peffer, an instructor in English, author, and a contributing photographer to *National Geographic* magazine, created a new course in the 1985 Summer Session entitled "Oceans." A combination of marine biology, environmental studies, and oceanography, the course includes four weeks of study in the labs at Andover, and two weeks "in the field," sailing along the New England coastline aboard the 55' schooner *Madame Sarah Abbot*, named for the founder of Abbot Academy.

The Short Term Institutes

Andover holds a series of Short Term Institutes which are intensive courses of study in a single subject, designed to offer high school students a unique residential learning experience. First begun in 1974, the Institutes offer a program in Art during the winter term and special summer Institutes within the context of the Andover Summer Session. These Institutes are designed to provide intensive study in a particular field at Andover and to complement a student's home school program, not to compete with it.

School Year Abroad

School Year Abroad offers to qualified Upper Middlers and Seniors a full academic year of living and studying in France or Spain. Originated by Andover, SYA is now jointly sponsored by Andover, Exeter and St. Paul's School. The program gives American students the advantages of living in a foreign culture without sacrificing progress at their home schools or strong preparation for college. Students live with host families, participate in the activities of local athletic and social clubs, and pursue a course of study (both in English and Spanish or French) under the supervision of sponsoring school teachers. SYA offers over two weeks of group travel, all college boards, and provides full academic credit, permitting students to graduate from Phillips Academy with their own class. School Year Abroad is financially independent of its sponsoring schools. Financial aid is available. A catalog can be obtained by writing:

Woodruff W. Halsey II, *Director*
School Year Abroad
Phillips Academy
Andover, MA 01810

Other Off-Campus Programs

Andover offers several complementary residential programs. The Washington Intern Program, sponsored by Andover and Phillips Exeter Academy, allows a group of Upper Middlers and Seniors to spend the spring term in Washington working in the offices of U.S. Senators and

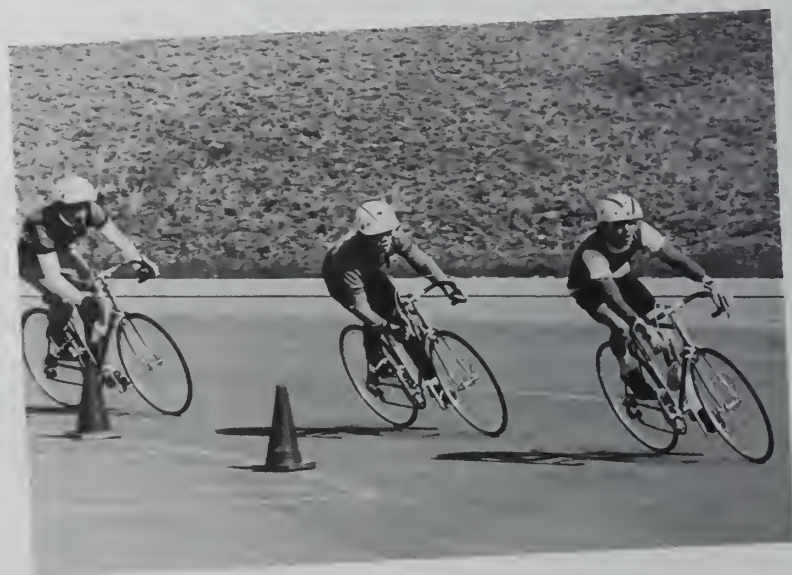


Representatives. Phillips Academy tuition, fees, and financial aid do not cover the cost of this program.

The Mountain School Program of Milton Academy is a semesterlong program for eleventh graders which offers students the opportunity to enjoy a different living and learning experience on a 300-acre farm in Vermont. Phillips Academy students may participate fall term only. Students will continue their academic courses in addition to activities which will emphasize practical skills and crafts. Students will work on the Mountain

School farm which supplies most of the food and heat for the school.

In addition to school-sponsored programs, Seniors may arrange off-campus projects related to their special interests. Some have worked as interns with officials in local government and members of the Massachusetts legislature, while others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative and careful planning of a course of study that will meet diploma requirements and free a block of time during the term.



Athletics



Following the merger of Abbot and Phillips Academies in 1973, the girls began to share more than the classroom with the boys. The first Phillips Academy Girls' Varsity Ice Hockey team was formed in 1977, and continues today with matches against many independent schools, colleges and universities in New England.

In sports, as in studies, students are expected to meet basic requirements and are given wide choice in broadening and deepening their skills, interests and dedication in athletics.

Upon arrival, all new students are given a swim test, and those who do not meet the requirement must take swim instruction as their fall afternoon sport. Juniors and new Lowers take a challenge-based Physical Education Course five hours a week for one term in addition to afternoon athletics. While taking this course, students are tested for physical aptitude and instructed in safety, health, and exercise physiology.

The required afternoon athletic program includes a wide variety of offerings in varsity and junior varsity competitive interscholastic sports, in intramural cluster-organized athletics and in instructional, recreational and fitness activities. New students are strongly encouraged to participate for at least one term at Andover in a team sport or a dance performance program.

Upperclassmen have the opportunity to substitute an activity or project for one term of athletics a year. Each spring the department offers an evening Senior Life Saving course and a Water Safety Instructors' course, in addition to required athletics, for those swimmers who wish official accreditation.

The school maintains several athletic facilities which include 12 playing fields and 25 tennis courts; the Borden, Memorial and Abbot Gymnasium Complex with swimming and diving pools, basketball and squash courts, weight training room and other conventional gym spaces; the

newly renovated Case Memorial Cage with its indoor track; the Sumner Smith Hockey Rink; the crew boathouse on the Merrimack River; the ski trails and jump at Holt Hill; and finally the Search and Rescue Room in Evans Hall which provides the base of operations for Andover's popular outdoor program.

Phillips Academy is committed to a required athletic program that provides a variety of sports and activities to its students. The Academy discourages overspecialization in sports at this age level; the athletic program is a complement to, not a substitute for, the academic curriculum. The Athletic Department oversees the program and its facilities with the support and advice of the Faculty Athletic Committee and the Student Athletic Advisory Board.

Isham Health Center

Phillips Academy employs a full-time physician/medical director, a licensed nurse-practitioner,

and twelve registered nurses to staff Isham Health Center. Isham has approximately 600 inpatient admissions and 7500 outpatient visits per school year. There are two dentists and a full time dental hygienist who are available for routine care and emergencies. A sports medicine clinic is run weekly by a board-certified orthopedic surgeon, in conjunction with three full-time athletic trainers who supervise rehabilitation, practices and athletic competitions. A dermatology clinic is held monthly and a registered dietician is available for consultation with students upon request. The Graham House Counseling Center employs three psychologists, who are available to students seven days a week.

The Isham staff maintains close contact with approximately forty medical and dental specialists in the greater Lawrence and Boston communities, who are readily available for consultation. Isham Health Center also welcomes requests for follow-up and continuing care from students' home physicians.

ATHLETICS

FALL TERM

Boys
 Ballet
 *Ceramics
 *Community Service
 Crew
 Cross-Country
 Cycling
 Football
 Jogging & Fitness
 Karate
 Modern Dance
 *Music
 Paddle Tennis
 *Photo Field Trips
 Search & Rescue
 Soccer
 Squash
 Swim Fitness
 Tennis
 Water Polo
 Yoga
Girls
 Ballet
 *Ceramics
 *Community Service
 Crew
 Cross Country
 Cycling

Field Hockey
 Jogging & Fitness
 Karate
 Modern Dance
 *Music
 Paddle Tennis
 *Photo Field Trips
 Search & Rescue
 Soccer
 Squash
 Swim Fitness
 Tennis
 Volleyball
 Water Polo
 Yoga

WINTER TERM

Boys
 Ballet
 Basketball
 *Ceramics
 *Community Service
 *Drama
 Fitness
 Gymnastics
 Hockey
 Jogging & Fitness
 Modern Dance
 *Music
 Paddle Tennis
 Search & Rescue

Skiing:
 Competitive (Alpine and Nordic)
 Recreational (Cross Country)
 Squash
 *Stage Crew
 Swimming
 Track
 Wrestling
 Yoga
Girls
 Ballet
 Basketball
 *Ceramics
 *Community Service
 *Drama
 Fitness
 Gymnastics
 Hockey
 Jogging & Fitness
 Modern Dance
 *Music
 Paddle Tennis
 Search & Rescue
 Skiing:
 Competitive (Alpine and Nordic)
 Recreational (Cross Country)

Squash
 *Stage Crew
 Swimming
 Track
 Yoga

SPRING TERM

Boys
 Ballet
 Baseball
 *Ceramics
 *Community Service
 Crew
 Cycling
 Golf
 Jogging & Fitness
 Karate
 Lacrosse
 Modern Dance
 *Music
 Recreational Cycling
 Search & Rescue
 Softball
 Squash
 *Stage Crew
 Team Cycling
 Tennis
 Track
 Yoga

Girls
 Ballet
 *Ceramics
 *Community Service
 Crew
 Cycling
 Golf
 Jogging & Fitness
 Karate
 Lacrosse
 Modern Dance
 *Music
 Paddle Tennis
 Recreational Cycling
 Search & Rescue
 Softball
 Speedball
 Squash
 *Stage Crew
 Team Cycling
 Tennis
 Track
 Yoga

*Activities in place of sports are available one term a year to upper-classmen



In the 1840's the widow of Principal Osgood Johnson devoted herself to the care of sick Seminary students at Samaritan House, built and named for that purpose, now a student dormitory. In spite of this, rows of gravestones mark the toll of epidemics. An Academy graduate of 1890 reports that no such care as Widow Johnson's was available to the Academy students of the 1890's: "There was no infirmmary. If you were ill, it was nobody's business but your roommate's, who brought you meals from Marland's unappetizing fare."

CALENDAR 1986-1987

Fall Term

Sept. 10, Wed.	Faculty return
Sept. 14, Sun.	New students arrive and register
Sept. 16, Tue.	Old students return and register
Sept. 18, Thurs.	Classes begin
Oct. 17, Fri.	Mid-term academic review
Oct. 24-26 Fri.-Sun.	Parents' Weekend (all parents)
Oct. 27, Mon.	No classes
Nov. 25, Tues.	Thanksgiving vacation begins, 1:00 p.m.
Dec. 1, Mon.	Thanksgiving vacation ends, 8 p.m.
Dec. 4, Thurs.	Classes end, 8 p.m.
Dec. 13, Sat.	Christmas vacation begins, 12 noon

Winter Term

Jan. 6, Tues.	Christmas vacation ends, 8 p.m.
Feb. 6, Fri.	Mid-term academic review
Feb. 9, Mon.	Mid-winter holiday (no classes)
March 6, Fri.	Classes end, 8 p.m.
March 14, Sat.	Spring vacation begins, 12 noon

Spring Term

March 31, Tues.	Spring vacation ends, 8 p.m.
April 20, Mon.	College Visiting Day (no classes)
May 1, Fri.	Mid-term academic review
May 29, Fri.	Classes end 8 p.m.
June 1, Mon.	Spring trimester examinations begin, 8 a.m.
June 5, Fri.	Spring trimester exams end, 6 p.m.
June 7, Sun.	Commencement
June 11, Thurs.	Spring trimester academic review meeting, 9 a.m.
June 12-14 Fri.-Sun.	Alumni Reunions
July 2, Thurs.	Summer Session begins
Aug. 12, Wed.	Summer Session ends

Admission

"Youth from Every Quarter"

The School's *Constitution*, written in 1778, states that Andover "shall be ever equally open to Youth of requisite qualifications from every quarter." With this principle in mind, the basic requirement for admission to Andover today continues to be evidence of sound character and strong academic achievement. The school is especially interested in candidates who demonstrate independence, maturity and concern for others, in addition to high performance in particular studies or activities. Valuing diversity in its student body, the school seeks to bring together a community from all parts of the country and from many nations.

The school's endowment covers approximately one-third of the cost of an Andover education. Therefore, in fact, every student receives financial aid. In addition, because of the generosity of a large number of alumni and friends, further financial assistance is available (see Financial Aid Section, page 52).



APPLICATION PROCEDURE

Priority will be given to those candidates who complete the application procedure, including the interview, by February 1. A decision from the Admission Committee will be mailed on March 10. The possibility of admission is considerably lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. A deposit of \$300 is required to reserve a place at the time admission is offered to an applicant.

If you have a question:

About Andover's admission or application procedures, call or write the Admission Office.
About an appointment: call or write the Appointment Secretary, Admission Office.
To request a catalog, call or write:

Admission Office
Phillips Academy
Andover, Massachusetts 01810
Telephone: (617) 475-3400 x 196
Office hours: Monday through Friday, 8:30 a.m. to 4:30 p.m.
Saturday, 8:30 a.m. to 12:00 noon,
October 1 through January 31

Left: Office of Admission and Financial Aid: l to r., Robert P. Hulburd, Admission Officer, Liason with Alumni Admission Representatives; Meredith Price, Associate Dean of Admission; Robert Edwards, Admission Officer; Jeannie Ford Dissette, Dean of Admission; Rebecca Carr, Admission Officer; Jean C. McKee, Admission Coordinator; Grace H. Taylor, Administrative Assistant; Peter Drench, Admission Officer. Not pictured, Timothy D. Dempsey, Director of Financial Aid.

4 STEPS TO BE COMPLETED FOR APPLICATION

1 Submit the Preliminary Application Card and the non-refundable \$20 fee as soon as possible. (Checks are payable to the Trustees of Phillips Academy.) **Application will not be considered unless the Preliminary Application Card and Fee are received.**

2 Complete the Personal Interview Requirement. Candidates must complete the required interview by February 1. Candidates are urged to schedule interviews in either the spring, summer, or early fall of the year before they intend to matriculate. It is in everyone's best interests for the interview to take place as early as possible. A visit to the Academy is desirable as it gives candidates a chance to have questions answered and to see the school. Please allow two hours for the tour and interview and be sure to dress with the weather in mind. **Candidates who cannot visit the Academy are themselves responsible for arranging an interview with an Alumni Admission Representative.** (See page 55.)

3 Return the Final Application Forms. Final application forms, mailed in mid-November to candidates who have filed preliminary applications, should be completed and returned as soon as final or mid-semester grades are available for the fall term. **The transcript must include current grades for application to be complete.** Priority consideration is given to applications completed by the advertised deadline of February 1. ("Late applicants" should return forms immediately.) Teacher recommendations should be from *current* teachers.

4 Take the Secondary School Admission Test. (12th Grade or Postgraduate candidates are not required to take the SSAT.

Secondary School Admission Test

The Bulletin of Information for Candidates, published by the Educational Testing Service, Princeton, NJ 08540, will be sent by Andover to all 1986–87 candidates who have filed a Preliminary Application. This Bulletin describes the Secondary School Admission Test, which will be given on the following dates:

December 13, 1986	March 7, 1987
January 17, 1987*	April 25, 1987*

June 20, 1987

*International administration

Candidates are strongly urged to take the SSAT administered in December, 1986. (The December tests will not be given in foreign countries.) Otherwise, the candidates should take the January, 1987 administration.

Early Decision

Andover does not participate in any early decision plan for admissions.

Twelfth Grade or Postgraduate Candidates

Instead of the Secondary School Admission Test, Senior and Postgraduate candidates must take either the Preliminary Scholastic Aptitude Test (P.S.A.T.) or the Scholastic Aptitude Test (S.A.T.) of the College Board Scholastic Aptitude Tests (C.E.E.B., Box 592, Princeton, NJ 08540).

Postgraduates are full-fledged members of the Senior Class and are eligible for all school activities. Because of their academic credits, they frequently have maximum flexibility in course selection.

School Costs and Financial Aid

Tuition and Fees, 1986-1987

The tuition charge for 1986-1987 is \$10,500 for boarding students and \$8,000 for day students.

The average annual cost to educate a student at Andover is approximately \$15,000. The difference between the annual cost and the tuition charge is made up from gifts and income from endowment, which itself is the product of the generosity of alumni, parents and friends.

Day Students

Day students must live in Andover, North Andover, North Reading, Methuen or Lawrence.

Phillips Academy admits students of any sex, race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of sex, race, color, national and ethnic origin in administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other school-administered programs.

To reserve a student's place for a given school year, a deposit in the amount of \$300 must be received by May 1 in the case of a returning student, or by the acceptance deadline in the case of a new admission. It is non-refundable under any circumstances.

The tuition less the above deposit is billed in two equal amounts, with the fall payment due August 1, and the final payment due December 1. The award of scholarship aid or loan reduces the billed amount accordingly.

An alternative is the use of the Insured Tuition Payment Plan, arranged with a private agency. Information about this alternative and an application form are sent to the parents before the first bill is due.

No refund will be made of the fall tuition for any student who withdraws, is dismissed, or is absent for any reason after registration in the fall. No refund will be made against the final payment for any student who withdraws, is dismissed, or is absent for any reason after returning to school at the beginning of the winter trimester.

An optional Tuition Refund Plan is offered, at 3% of tuition, to protect against the departure of a student for any reason. Under this plan 75% of the unused portion of the tuition for school days remaining is refunded.

Tuition covers instruction, board, room (including basic furniture), physical training and most athletic privileges, use of laboratory equipment and material, admission to all authorized athletic contests and most authorized entertainments at George Washington Hall or elsewhere on campus, including the Saturday evening movies.

The school charges do not include tutoring, language training, special instruction in music or certain athletics, materials fees for art courses, medical expenses, laundry, textbooks, dues to school organizations or breakage and damage to school property. The school charges do not include cost of participation in the Washington Intern Program, School Year Abroad, or other off-campus programs. The school provides sports

uniforms and most athletic equipment. Students are required to bring their own footwear and urged to bring along whatever other personal athletic equipment they already possess. Bills for items not included in the school charges may be rendered at any time during the school year.

All charges must be paid by their due date in order to assure a student's place at the Academy. Students with past-due bills may be asked to leave any time. The diploma of the Academy will not be awarded to Seniors whose school accounts are not paid in full by June 1.

Other Expenses

The following expenses will generally be similar to those a student would experience if he or she were at home: athletic equipment; laundry and cleaning; dues and publications and spending money.

Travel expense will vary according to home location. Books and supplies depend on course selection, and are approximately \$600.

Financial Aid

Financial need should never discourage a student from applying for admission to Phillips Academy. Andover selects students for admission on the basis of qualifications, not financial circumstances.

Andover offers full Scholarship Grants for low-income families; Scholarship Grants and low-interest, deferred-payment Student Loans for a broad spectrum of need, and Parent Loans for upper-middle income parents.

Scholarship Grants: \$2,571,000 in 1985-86

Average grant: \$6,138

Student Loans: \$297,900 in 1985-86

(presently at 6% interest)

A moderate-interest Parent Loan Program is available to upper-middle income parents who do not qualify for Scholarship Grants or Student Loans, to help them spread educational costs more evenly over the school and college years.

Parent Loans: \$250,000 available in 1985-86

(presently at 10% interest)

If you are not sure whether you qualify for financial aid of some kind, we encourage you to apply; this is the best way to find out.



Because Andover values and seeks an economically diverse student body, aid is awarded only on a basis of demonstrated need. In 1986, no qualified student was denied admission for financial reasons.

Need depends on many variables, such as family income, number of children, age of parents, other tuitions, unusual medical expenses, taxes, assets, liabilities, etc.

To apply for financial aid:

1. When you make out the Preliminary Application be sure to check "yes" for Financial Aid.
2. Andover will send you the Parents' Financial Statement (PFS). Fill it out and send the original to the School Scholarship Service in Princeton, NJ. The SSS uses a formula nationally accepted among independent schools to analyze need, and provides Andover with a preliminary estimate of your family's ability to contribute to educational expenses. The process assures that all schools to which a student applies will base their calculations on the same data.
3. Send a copy of the PFS to Andover prior to January 15, along with the most recent IRS 1040 form, or other income tax form used.

Request for aid filed after the January 15 deadline may not be processed in time to be included in the initial allotment of scholarship funds. Requests filed after January 15 must await subsequent availability of scholarship monies.

In case of divorced or separated parents:

The resources of both natural parents must be considered in cases where a divorce or separation has taken place. This information should be provided on the Parents' Financial Statement (PFS). The availability of complete information from both parents is essential to assure a fair assessment of the family contribution. Lack of this information may result in no awarding of aid or an arbitrarily low financial aid package.

Financial aid award letters are mailed in the same envelope as the Certificate of Admission, on March 10.

Parent Loan Plan:

A Parent Loan Plan is available, at a modest rate of interest, to families in the \$40,000 to \$90,000

income range, as their needs require, with preference given to students entering 9th and 10th grades. Repayment of these loans begins immediately, but repayment of the principal is deferred during the students' college years and then continues for two additional years.

For more detailed information, direct your letter or telephone call to the Director of Financial Aid, Phillips Academy, Andover, MA 01810. Telephone: 617-475-3400 (ext. 196).

Alumni Admission Representatives

While it is advisable from the student's point of view to visit the school, distance frequently renders a visit impractical. When this is the case, the candidate should write or telephone for an interview with the most conveniently located Alumni Admission Representative. (Please see list on page 55.) When you arrange for an interview with an Alumni Admission Representative, please notify the Andover Admission Office of the date of the interview and the name of the interviewer. This procedure will help us keep your records up-to-date. A candidate unable to arrange for an Alumni Admission Representative interview should communicate with the Admission Office for assistance.

ALABAMA

Birmingham

A. Henry Gaede, Jr., Esquire '57
Bradley, Arant, Rose & White
1400 Park Place Tower 35203
(205) 252-4500

ALASKA

Anchorage

John K. Brubaker '55
2110 Otter Street 99504
(907) 279-3581

Fairbanks

K. Andre McMullen '66
741 Chena Hills Drive 99709
(907) 479-2964

ARIZONA

Flagstaff

Mrs. Ellen Bryant
(Ellen Huntington) '65
3 Antoinette Way 86001
(602) 774-5733

Scottsdale

Mrs. Geraldine Miller
(Geraldine Treadway) '47
4721 N. 70th Street 85251
(602) 371-6415

Tucson

John S. Greenway '42
2200 E. Elm Street 85719
(602) 325-1541
Richard L. Morse '53
5402 East Holmes 85711
(602) 621-4828
Donald B. Rollings '70
363 S. Meyer 85701
(602) 623-4091

ARKANSAS

Forrest City

Henry Loeb III '39
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125 Hill Street 72335
(501) 633-1410

Harrison

James E. Liles '55
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(501) 941-8538

Little Rock

Mose Smith III, M.D. '48
5326 West Markham Street
Suite 14 72205
(501) 664-1527



CALIFORNIA

Beverly Hills

Thompson K. Vodrey '52
1529 Gilcrest Drive 90210
(213) 275-5529

Burlingame

Maxwell Steinhardt '73
1436 Balboa Avenue 94010
(415) 342-1293

Corona Del Mar

John E. Kidde '64
3907 Inlet Isle Drive 92625
(714) 640-7075

Fresno

Geoffrey M. Brittin, M.D. '52
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1303 E. Herndon Avenue 93710
(209) 449-3120

Huntington Beach

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McDonnell Douglas Astronautics
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(714) 786-8500

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Alan Fox '60
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1600 E. Hill Street 90806
(213) 427-5471

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600 Wilshire Boulevard
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Gibson, Dunn & Crutcher
333 S. Grand Avenue 90071
(213) 229-7308

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4616 Keniston Avenue 90043
(213) 294-1226

Russell K. Decker '56
Decker Management Systems
515 S. Flower Street
Suite 325 90071
(213) 489-2170

Walter L. Farley, Jr. '28
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(213) 476-1028

Mrs. Elizabeth Figus
(Elizabeth Gorsuch) '42
818 N. Doheny Drive #703 90069
(213) 550-1971

Trevor A. Grimm '56
Kaplanis & Grimm
551 S. Oxford Avenue 90020
(213) 380-0303

Jeffrey Hiroto '77
1133 Hicks Avenue 90063
(213) 264-3498

F. Jack Liebau '81
Capital Research Company
333 South Hope Street 90071
(213) 486-9215

Tim McChristian '73
4225 Via Arbolada #532 90042
(213) 222-2132

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(415) 321-0708

Peter W. Lee '60
1100 Trinity Drive 94025
(415) 823-5788

William M-S Lee '51
271 West Floresta Way 94025
(415) 854-4918

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Craig B. Reynolds '73
P.O. Box 470 95553
(707) 943-3089

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(415) 654-5382

Patrick J. O'Hern '65
Lawrence Livermore
21 Bowles Place 94610
(415) 422-4874

Thomas E. Pollock III '61
6039 Bullard Drive 94611
(415) 398-3825

Alumni Admission Representatives

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Ms. Anne W. Rollings '75
P.O. Box 90878 92109

Palo Alto

Donald A. Way '63
320 Kellogg Avenue 94301
(415) 324-0606

Pasadena

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677 La Loma Road 91105
(213) 622-5555

Graeme Henderson '52
1613 Vista Lane 91103
(818) 449-6152

Ms. Judy Mustille '66
1146 Wellington Avenue 91103
(818) 793-4964

Christopher L. Rafferty '66
Union Venture Corporation
225 South Lake Avenue 91101
(818) 304-1982

Riverside

Peter C. Parsons '55
Riverside County Publishing Co.
P.O. Box 8368 92515
(714) 689-1122

San Anselmo

H. Leonard Richardson '45
5 Oakhill Drive 94960
(415) 453-4934

San Diego

Norman R. Allenby '51
Hillyer & Irwin
530 B Street
Suite 1400 92101-4479
(619) 234-6121

San Francisco

Hobart M. Birmingham, Jr. '62
Bank of America Building
555 California Street
34th Floor 94104
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One Market Place
Spear Street Tower 94105
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Martin Quinn '60
311 California Street
10th Floor 94104
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225 Bush Street
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(415) 983-1203

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Heller, Ehrman, White & McAuliffe
44 Montgomery Street
Suite 3000 94104
(415) 772-6084

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825 Parkcenter Drive 92705
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200 E. Carrillo St., Suite 100 93101
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1745 Maple Avenue #73 90503
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Noll Law Office
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University of Kansas 66045
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Stilwell

James J. Fisher '56
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KENTUCKY

Louisville

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100 E. Liberty Street 40270
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Willmar Avenue 40218
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MAINE

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Thomas Rodes '54
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% Robert E. Braitman
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Grosse Pointe

E. Kidder Meade '65
455 Lakeland Avenue 48230
(313) 885-4314

Grosse Pointe Shores

William D. Dahling '46
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University

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Frederick G. Thompson III, M.D. '47
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St. Louis

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(Jane Thompson) '59
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Michael L. Muldrow '72
7741 St. Albans 63117
(314) 725-1307
Peter W. Schandorff '64
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(314) 773-3808
William M. VanCleve '46
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Reno

Robert S. Kimball III '51
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NEW HAMPSHIRE

Jaffrey

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NEW JERSEY

Hoboken

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Cerny & Mochary
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NEW MEXICO

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Cowen & Co.
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Pittsboro
Rollin B. Fisher '40
83 Fearington Post 27312
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William A. Mann '62
6901 Woodmere Drive 22612

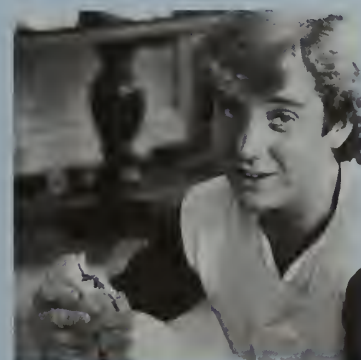
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Evergreen Point

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STATISTICAL INFORMATION for 1985-1986



In 1864 Shimeta Neesima left Japan as a stowaway on the clipper ship "Wild Rover" for America and sold his samurai sword for a Chinese New Testament. He was adopted by the shipowner, an Andover Trustee, was christened Joseph Hardy Neesima, graduated from Andover in 1867, later from Amherst and the Andover Theological Seminary, and became the first Japanese to be ordained a Congregationalist minister. Neesima returned to Japan to found The Doshisha, a great university in Kyoto dedicated to Japanese and Christian ideals. Doshisha recently celebrated its 100th birthday.

Geographical Distribution*

Alabama	4
Alaska	0
Arizona	2
Arkansas	0
California	67
Colorado	11
Connecticut	81
Delaware	3
District of Columbia	15
Florida	21
Georgia	3
Hawaii	2
Idaho	0
Illinois	27
Indiana	8
Iowa	10
Kansas	2
Kentucky	3
Louisiana	1
Maine	18
Maryland	28
Massachusetts	433
Michigan	14
Minnesota	8
Mississippi	5
Missouri	2
Montana	1
Nebraska	2
Nevada	1
New Hampshire	33
New Jersey	38
New Mexico	2
New York	158
North Carolina	18
North Dakota	1
Ohio	19
Oklahoma	2
Oregon	1
Pacific Islands	1
Pennsylvania	27
Rhode Island	10
South Carolina	5
South Dakota	0
Tennessee	5
Texas	19
U.S.V.I. & P.R.	0
Utah	1
Vermont	6
Virginia	13
Washington	3
West Virginia	2
Wisconsin	5
Wyoming	4
Total U.S.	1145

Bermuda	2
Brazil	2
Canada	5
China, Rep. of	1
China, Peoples' Rep. of	3
Colombia	1
Comoro	1
Czechoslovakia	1
France	6
Germany	3
Great Britain	3
Guatemala	1
Haiti	1
Hong Kong	8
Indonesia	1
Italy	2
Japan	1
Korea	3
Liberia	2
Malaysia	1
Mexico	1
Morocco	1
Netherlands Antilles	2
Saudi Arabia	4
Singapore	3
Somalia	1
Spain	6
Thailand	1
Yugoslavia	2
Total Foreign	69
SCHOOL TOTAL	1214

	<u>Girls</u>	<u>Boys</u>	<u>Total</u>
Seniors	163	226	389
Uppers	145	198	343
Lower	137	179	316
Juniors	78	88	166
	523	691	1214
Total Boarding Students			964
Total Day Students			250
TOTAL			1214

*Based on place of current
RESIDENCE, not citizenship.

College Matriculations for the Class of 1985

The Class of 1985 applied to 184 different colleges and matriculated at 88 colleges and universities across the country.

COLLEGE	AD- MITTED	MATRIC- ULATED	COLLEGE	AD- MITTED	MATRIC- ULATED
Amherst	10	4	Occidental	3	1
Barnard	22	9	Pennsylvania State	1	1
Bates	14	4	Pomona	8	1
Beloit	4	1	Princeton	29	13
Boston College	7	4	Rice	4	1
Boston University	10	2	RISD	1	1
Bowdoin	5	1	Rollins	2	1
Brown	50	25	RPI	4	1
Cal. Tech.	2	1	St. Andrews, Scotland	3	3
Carleton	6	1	St. Lawrence	8	2
Carnegie Mellon	6	2	Skidmore	6	2
Colby	11	1	Smith	9	4
Colgate	9	3	Stanford	16	9
Colorado College	8	2	Sweet Briar	1	1
Columbia	25	9	Syracuse	5	1
Columbia Sch. of Eng.	5	3	Trinity	18	2
Connecticut College	14	3	Tufts	24	3
Cornell	24	9	Tulane	9	1
Dartmouth	18	9	Univ. of Cal. @ Berkeley	30	4
Davidson	4	2	Univ. of Cal. @ L.A.	2	1
Depauw	4	2	University of Colorado	11	2
Duke	26	11	Univ. of Massachusetts	24	2
Emory	10	1	University of Michigan	40	8
Franklin College, Switz.	1	1	Univ. of New Hampshire	15	4
Franklin & Marshall	6	1	Union	3	1
Georgetown	37	13	Univ. of North Carolina	9	3
Georgia Tech.	1	1	Univ. of Pennsylvania	45	12
Grinnell	1	1	University of Richmond	2	1
Hamilton	11	2	University of Vermont	10	1
Hanover College	1	1	University of Virginia	9	4
Harvard	42	30	Univ. of Western Ontario	1	1
Hobart	5	2	University of Wisconsin	5	2
Holy Cross	8	2	Vanderbilt	18	5
Indiana University	1	1	Vassar	15	1
Kenyon	6	2	Washington University	8	1
Lafayette	10	2	Wellesley	9	2
Lehigh	8	2	Wesleyan	40	15
Macalester	5	2	Wheaton	4	2
McGill	1	1	William & Mary	5	1
Middlebury	37	20	Williams	8	2
MIT	6	3	Yale	39	25
Mount Holyoke	10	2	York	1	1
New York University	6	3			
Northwestern	24	3			
Notre Dame	3	3			
Oberlin	22	7			

College Admissions

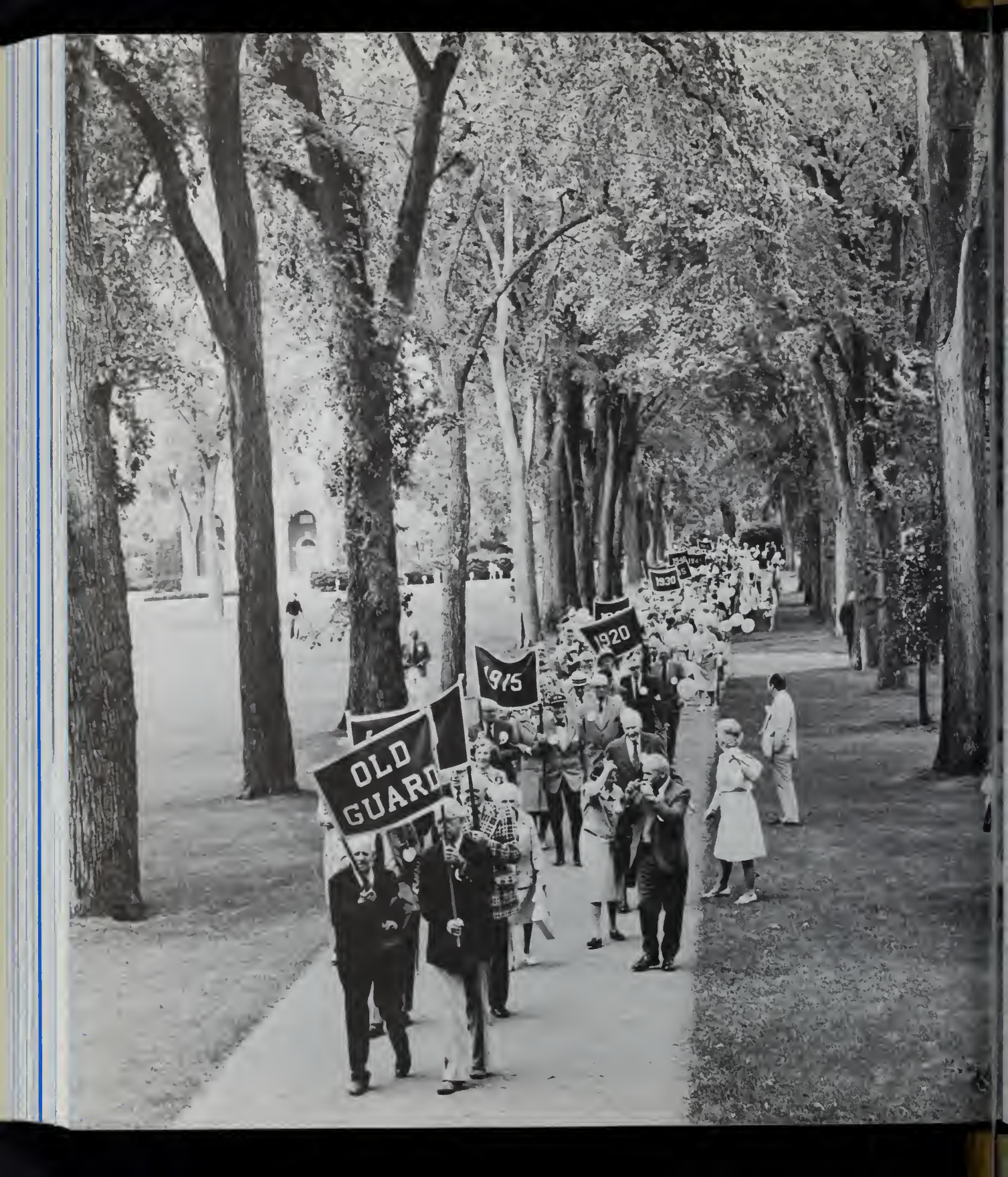
Admission to colleges is not based on a student's mere presence at Andover, but is based on how well the student has used this experience. All selective colleges exercise judgments relative to factors over and above academic ability in selecting a freshman class. While some of these factors relate to exceptional talents in one area or another, others are related to diversity in background and educational objectives.

The college admissions picture is entirely different and infinitely more complex now than it

was in past decades. Competition for admission to selective colleges is rigorous, and Andover students are encouraged to apply across a range of choices to colleges with varying degrees of selectivity. The one constant in all of this should be a real desire to educate oneself. To this end the College Counseling Office works with the class as a whole and with each candidate to help each one draw up a list of colleges that makes sense.

Phillips Academy seniors go to college well prepared for the academic program and social experience that lie ahead.





TRUSTEES

MELVILLE CHAPIN '36

A.B., J.D.

President

elected 1974

elected President, 1981

Cambridge, Massachusetts

DONALD W. McNEMAR

B.A., M.A., Ph.D.

Clerk

elected 1981

Andover, Massachusetts

CHARLES APPLETON MEYER '35

A.B.

Treasurer

elected 1969

elected Treasurer 1976

Lake Forest, Illinois

FREDERICK W. BEINECKE II '62

B.A., J.D.

elected 1980

New York, New York

WILLIAM WADE BOESCHENSTEIN '44

S.B.

elected 1971

Perrysburg, Ohio

STEPHEN BRADNER BURBANK '64

A.B., J.D.

elected 1980

Philadelphia, Pennsylvania

RICHARD LEE GELB '41

A.B., M.B.A.

elected 1976

New York, New York

ROBERT LIVINGSTON IRELAND III '38

A.B., LL.B.

elected 1960

New York, New York

CAROL HARDIN KIMBALL '53

A.B.

elected 1974

New York, New York

ELIZABETH PARKER POWELL '56

B.A., M.A., M.B.A.

elected 1980

Wellesley Hills, Massachusetts

ALEXANDER B. TROWBRIDGE '47

B.A.

elected 1985

Washington, D.C.

DAVID M. UNDERWOOD '54

B.A.

elected 1983

Houston, Texas

THOMAS H. WYMAN '47

B.A.

elected 1980

New York, New York

Alumni Trustees

CYNTHIA EATON BING '61

B.A.

President of Alumni Council

elected 1984 for 2 years

New York, New York

CLINTON J. KENDRICK '61

B.A., M.B.A.

Ex Officio as Chairman

of the Alumni Fund to 1986

London, England

RICHARD D. LOMBARD '49

B.A., M.B.A.

elected 1982 for 4 years

New York, New York

SYBIL P. SMITH A'61

B.A.

elected 1984 for 4 years

Wellesley, Massachusetts

FRANCES YOUNG TANG '57

B.S.

elected 1982 for 4 years

New York, New York

MORRIS E. ZUKERMAN '62

A.B., M.A., M.B.A.

elected 1984 for 4 years

Pacific Palisades, California

Trustees Emeriti

PHILIP KIRKHAM ALLEN '29

A.B.

1969-1980

Andover, Massachusetts

GEORGE BUSH '42

A.B.

1967-1980

Washington, D.C.

JOHN LEWIS COOPER '31

A.B.

1968-1981

Dover, Massachusetts

CHARLES STAFFORD GAGE '21

A.B., A.M.

1952-1976 (Treasurer 1966-1976)

New Haven, Connecticut

JOHN USHER MONRO '30

A.B.

1958-1983

Jackson, Mississippi

GERARD PIEL '33

A.B., D.Sc., Litt. D., L.H.D., LL.D.

1969-1985

New York, New York

HEADMASTER'S OFFICE

DONALD WILLIAM McNEMAR
Headmaster

B.A., M.A., Ph.D.

PETER QUACKENBUSH McKEE

Associate Headmaster

A.B., Ed.M.

JANE H. MUNROE

Executive Secretary to the Headmaster

OFFICE OF THE DEAN OF FACULTY

K. KELLY WISE

Dean of Faculty

A.B., M.A.

WILLIAM FRANKLIN GRAHAM

Clerk of the Faculty

S.B.

OFFICE OF THE DEAN OF STUDIES

JEANNE E. AMSTER

Dean of Studies

A.B., A.M.

HERBERT HARRY MORTON III

Registrar

A.B.

DAVID A. PENNER

Scheduling Officer

A.B., M.A.

JOAN F. SCHLOTT

Recorder

B.S.

DEANS OF THE RESIDENTIAL CLUSTERS

JONATHAN STABLEFORD

Dean of Residence

B.A., M.A.T.

CARL EDWARD KRUMPE, JR.

Abbot Cluster

A.B., A.M.

PAMELA BROWN

Pine Knoll Cluster

ScB., M.A.L.S.

HELMUTH P. JOEL

Rabbit Pond Cluster

A.A.

JOHN A. GOULD

West Quadrangle South Cluster

A.B., M.A.

VICTOR W. HENNINGSSEN III

Flagstaff Cluster

B.A., A.M., Ed.M.

HENRY B. WILMER, JR.

West Quadrangle North Cluster

B.A., M.A.

CARROLL WESLEY BAILEY

Director of Residential Affairs

A.B., J.D.

PRISCILLA K. BONNEY-SMITH

Associate Dean

B.A., M.A.T.

OFFICE OF ADMISSION AND FINANCIAL AID

JEANNIE FORD DISSETTE

Dean of Admission

A.B., M.A.

MEREDITH PRICE

Associate Dean of Admission

A.B., M.A.T.

TIMOTHY D. DEMPSEY

Director of Financial Aid

B.A.

JEAN C. McKEE

Admission Coordinator

A.B.

ROBERT P. HULBURD

Admission Officer

A.B., M.A.

REBECCA CARR

Admission Officer

B.A.

PETER L. DRENCH

Admission Officer

B.A., M.A.

ROBERT A. EDWARDS

Admission Officer

B.A.

BUSINESS OFFICE

GEORGE A. NEILSON, JR.

Business Manager

B.S., M.Ed.

SUSAN GARTH STOTT

Assistant Business Manager

B.A., M.C.R.P.

DONALD HENRY BADE

Comptroller

B.B.A.



FACULTY 1985-86

The date following the name indicates the year the instructor joined the Andover faculty. This reflects the faculty for the 1985-86 school year.

J. ELAINE ADAMS (1982)
Instructor in Physics and Astronomy
B.S. Gordon; Ph.D. Northeastern

JEANNE E. AMSTER (1979)
Dean of Studies; Instructor in History and the Social Sciences
A.B. Mt. Holyoke; M.A. Stanford

CHARLES EMORY APGAR III (1969)
Instructor in Physics
A.B. Earlham; M.A.T. Brown

VINCENT B.J. AVERY (1976)
Chairman Department of Philosophy and Religious Studies; Instructor in Religion and Philosophy
S.T.L. Gregorian; S.T.D. Academic Alphon-siana, Rome

DONALD H. BADE (1975)
Comptroller
B.B.A. University of Wisconsin

CARROLL WESLEY BAILEY (1970)
Director of Residential Affairs; Instructor in English
A.B., J.D. University of Pittsburgh

PETER JOSEPH BALEYKO (1970)
Assistant to the Comptroller
S.B. Boston College

LESLIE BALLARD (1973)
Chairman Department of Chemistry; Instructor in Chemistry and Biology
B.A. Sarah Lawrence, M.A.T. Harvard

SETH B. BARDO (1981)
Instructor in English
B.A. Yale; M.A.T. Harvard

DONALD THOMPSON BARRY (1980)
Instructor in Mathematics
B.A. Carleton; M.Div. Yale

YOLANDE BAYARD (1973)
Instructor in French
B.S., M.A. Central Connecticut State College

AUDREY NYE BENSLEY (AA 1965)
Instructor in Art

GORDON GILMORE BENSLEY (1949)
Instructor in Art on the Ammi Wright Lancashire Foundation
A.B. Yale

LOUIS M. BERNIERI (1977)
Instructor in English
A.B. Harvard; M.A. Middlebury

GEORGE WILLIAM BEST (1958)
Instructor in Mathematics on the John Mason Kemper Foundation
B.S. Union College; A.B. Boston University

KATHRYN A. BIRECKI (1984)
Athletic Trainer
B.S. Central Connecticut State University

JENNIFER BOND (1985)
Instructor in Physics and Astronomy
B.A. Wellesley

PRISCILLA KEENE BONNEY-SMITH (1974)
Associate Dean
A.B. Bates; M.A.T. Brown

JOANNE Y. BORLAND (1984)
School Physician
A.B. Bryn Mawr; M.D. Harvard

NANCY W. BOUTILIER (1984)
Instructor in English
A.B. Harvard

MIMI DENTON BRAVAR (1980)
Instructor in Music
B.S. Juilliard, M.M. Boston University

CAROLE BRAVERMAN (1979)
Instructor in English
B.A. Brooklyn College; M.A. Purdue

CAROLYN B. BRECHER (1974)
Instructor in Modern Dance; Assistant in Audio-Visual
A.B. Bard

NANCY B. BROTHER (1981)
Academic Counselor
B.S. University of Nebraska; Ed.M. University of Lowell

PAMELA BROWN (1980)
Academic Counselor, Director Academic Counseling Program
B.A. Penn State; M.Ed. Boston College; L.D. Certificate Curry College

JAMES LEIGHTON BUNNELL (1967)
Instructor in History and the Social Sciences
A.B. University of the South; A.M. Vanderbilt

Faculty

ROBERT LAWRENCE BURNHAM (1984)
Instructor in Science
B.A. Dartmouth; M.S. University of Montana

STEPHEN DOUGLAS CARTER (1980)
Dean of Pine Knoll Cluster; Instructor in Mathematics

Sc.B. Brown; M.A.L.S. Wesleyan

JOHN PATTEN CHIVERS (1960)
Instructor in German

A.B. Wesleyan; A.M. Middlebury

SUSAN B. CLARK (AA 1969)
Instructor in Classics and History
A.B. Swarthmore; M.A. Yale

ANDREW J. CLINE (1979)

Instructor in Mathematics

B.A. College of Wooster; M.A.L.S. Wesleyan

DAVID OWEN COBB (1968)

Instructor in English on the Elizabeth Milbank Anderson Foundation

A.B. University of Maine; A.M. Middlebury

THOMAS EDWARD CONE III (1966)

Instructor in Biology

B.S. Trinity; M.A.T. Brown

CHRISTOPHER CAPEN COOK (1964)

Director of the Addison Gallery of American Art; Instructor in Art

A.B. Wesleyan; M.F.A. University of Illinois

JENIFER M. COOKE (1983)

Data Base and Alumni Records Manager

B.A. Dartmouth

ALBERT COONS (1979)

Instructor in Mathematics

B.A. Johns Hopkins

JAMES HAROLD COUCH (1953)

Instructor in Spanish

A.B., M.A. University of Wyoming

DOUGLAS EVERETT CRABTREE (1971)

Chairman Department of Mathematics;

Instructor in Mathematics

A.B. Bowdoin; M.A. Harvard; Ph.D. University of North Carolina

BRUCE M. CRAWFORD (1980)

Director of Physical Plant

B.S., M.M.S. Lowell Tech

ROBERT LEE CRAWFORD (1971)

Director of College Counseling; Instructor in History and the Social Sciences

B.A. Northwestern; S.T.B. The General Theological Seminary; M.A. University of Pennsylvania

KATHLEEN MARY DALTON (1980)

Instructor in History and the Social Sciences

B.A. Mills; M.A., Ph.D. Johns Hopkins

SANDRA M. DEJONG (1983)

Instructor in English

B.A. Harvard-Radcliffe

MARY LOU DeLONG (1985)

Director of Planned Giving

B.A. Newton College of the Sacred Heart

TIMOTHY D. DEMPSEY (1983)

College Counselor; Instructor in Mathematics

B.A. Connecticut College

JEANNIE FORD DISSETTE (1985)

Dean of Admission

A.B., M.A. University of Pennsylvania

GEORGE MACNAMARA DIX (1972)

Instructor in Modern Languages

A.B. Brown; A.M. Middlebury

SHERMAN FREDERICK DRAKE (1953)

Instructor in Mathematics on the Emilie Belden

Cochran Foundation

B.S. U.S. Naval Academy; Ed.M. Boston University

PAULA F. DREWNIANY (1981)

Instructor in Mathematics

A.B. Smith

FRANK McCORD ECCLES (1956)

Instructor in Mathematics on the Independence

Teaching Foundation Endowment

B.S.M.E. Princeton; M.A. Harvard

HELEN M. ECCLES (1975)

Co-House Counselor

A.B. Bryn Mawr

GEORGE HOWARD EDMONDS (1961)

Instructor in English (on leave)

A.B. Amherst; Ed.M. Harvard

PATRICIA HOPE EDMONDS (1974)

Director of Capital Development

A.B. Mount Holyoke, M.A.T. Radcliffe

CELIA ANN EVANS (1985)

Instructor in Biology

B.A. Humboldt State University

ADA M. FAN (1983)

Instructor in English

B.A. Harvard-Radcliffe; M.S. Boston University; M.A. University of Rochester

MARION FINBURY (AA 1969)

Associate Director of College Counseling

A.B. Vassar

DAVID R. FLINT (1985)

Exchange Instructor in Physics

Certificate of Education, Cambridge University; Honors degree, Bristol University

EVERETT GENDLER (1977)

Jewish Chaplain; Instructor in Religion and

Philosophy

B.A. University of Chicago; M.H.L.

Jewish Theological Seminary

EDWARD B. GERMAIN (1979)

Instructor in English

B.A., M.A., Ph.D. University of Michigan

MARGARET FERGUSON GIBSON (1984)

Roger Murray Co-Writer in Residence

B.A. Hollins; M.A. University of Virginia

PETER ADDLEY GILBERT (1976-81, 1984)

Instructor in English, Editor of Andover

Bulletin

A.B. Dartmouth; J.D. Georgetown

University Law; M.A. University of Virginia

LYDIA BUTLER GOETZE (1980)

Instructor in Biology

A.B. Radcliffe; M.A.T. Johns Hopkins

JANE SOYSTER GOULD (1985)

Protestant Chaplain

B.A. Stanford

JOHN ALLEN GOULD (1982)

Dean of West Quadrangle South Cluster;

Instructor in English

B.A. Williams; M.A. Indiana University

DAVID M. GRAHAM (1978)

Instructor in Physical Education

B.S. Miami University of Ohio; M.Ed. East Stroudsburg

LYNDA ELLEN GRAHAM (1984)

Director of Foundation & Corporate Support

B.A. Brown

MARY FULTON GRAHAM (1985)

Instructor in English

B.A. Mt. Holyoke; M.A. University of

Virginia; Ph.D. University of New Hampshire

MARY M. GRAHAM (1978)

House Counselor

WILLIAM FRANKLIN GRAHAM (1952)

Clerk of the Faculty; Instructor in Mathematics

S.B. University of Michigan

- RICHARD K. GROSS, S.J. (1981)
Roman Catholic Priest; Instructor in History and the Social Sciences and Religion and Philosophy; Co-Director of Community Service Program
A.B. Boston College; M.A. London School of Economics; M.Div. Weston School of Theology
- CHRISTOPHER JUDE GURRY (1974)
Instructor in History and the Social Sciences
A.B. Harvard; M.A. Tufts
- SARAH CRAVER GURRY (1982)
Director of the Parent Fund; Associate Director of Annual Giving
B.S. University of Vermont; M.A. Harvard Graduate School of Education
- THOMAS ROBERT HAMILTON (1969)
Chairman Biology Department; Instructor in Biology
B.S. Tusculum College; M.S. University of Pennsylvania; M.A.T. Brown
- EDMOND EMERSON HAMMOND, JR. (1953)
Instructor in Mathematics on the Jonathan French Teaching Foundation; Computer Systems Consultant
S.B. Haverford; Sc.M. Brown
- LAURA HANFT (1985)
Instructor in English
B.A. Williams; M.A. Brandeis; J.D. Harvard Law
- FRANK LEE HANNAH (1968)
Instructor in Mathematics
A.B., A.M. Dartmouth
- ANN H. HARPER (1979)
Instructor in English
B.A. University of Pennsylvania; M.A. University of Chicago
- JUDITH ANN HAUPIN (1985)
Associate Comptroller
B.A. SUNY at Albany
- BARBARA E. HAWKES (AA 1972)
Instructor in Biology
A.B. Tufts; M.A. Northeastern
- KEVIN P. HEELAN (1983)
Chairman Department of Theater; Instructor in Theater
B.A. St. Mary's College of Maryland; M.F.A. Smith
- KATHERINE ANNE HENDERSON (1984)
Assistant Director of Athletics
B.S. State University of New York; M.A. University of New Hampshire
- VICTOR WILLIAM HENNINGSSEN III (1974-1979, 1985)
Dean of Flagstaff Cluster; Instructor in History and the Social Sciences
B.A. Yale; A.M. Stanford; Ed.M. Harvard
- HENRY LYNN HERBST (1972)
Instructor in French
A.B. Hamilton; A.M. University of Pennsylvania
- SALLY CHAMPLIN HERBST (1974)
Instructor in French
A.B. Mount Holyoke, M.A. Tufts
- ALOYSIUS JOHN HOBAUSZ (1968)
Director of the Audio-Visual Center
S.B. Puskas Telecommunication Institute, Budapest
- OLIVIER HOCHET (1985)
Visiting Fellow in French
B.A. St. Vincent; Licence de Philosophie University Rennes
- THOMAS SALKALD HODGSON (1977)
Instructor in Religion and Philosophy
B.A. Williams; M.A. Yale
- LOUIS JOHN HOITSMA, JR. (1953)
Instructor in Mathematics
B.S., Ed.M. William and Mary
- ROBERT PENNIMAN HULBURD (1953)
Admission Officer
A.B. Princeton; M.A. Middlebury
- CAROL ISRAEL (1985)
Psychological Counselor and Instructor in Psychology
B.A., M.A. University of Chicago
- MARGARET N. JACKSON (1983)
Director of Psychological Services; Chairman of Psychology Department, Instructor in Psychology; Psychological Counselor
B.A. State University of New York (Binghamton); M.Mus. Manhattan School of Music; M.A. Long Island University
- HELMUTH W. JOEL, JR. (1985)
Instructor in English
B.A. Dickinson; M.A., Ph.D. University of Pennsylvania
- SUZU C. JOSEPH (1980)
Instructor in French
Licence Anglais, La Sorbonne; M.A. Indiana University
- PAUL KALKSTEIN (1970)
Director of Athletics on the John H. Castle, Jr. Instructorship; Instructor in English
A.B. Princeton; M.A.T. Yale
- KAREN A. KENNEDY (1985)
Instructor in Physical Education
B.S. Springfield College
- LORING GOSFORD KINDER (1984)
Instructor in Mathematics
B.S. St. Lawrence University
- NICHOLAS VAN HOUTEN KIP (1968)
Instructor in Classics
A.B. Princeton; M.A. Trinity
- MARC DANA KOOLEN (1974)
Instructor in Biology
B.S. St. Lawrence; M.S. Purdue
- GEORGES NICOLAS KRIVOBOK (AA 1969)
Chairman Russian Department; Instructor in French and Russian
B.A. Swarthmore; M.A. Middlebury
- CARL EDWARD KRUMPE, JR. (1960)
Dean of Abbot Cluster; Chairman Classics Department; Instructor in Classics and History on the Alfred Ernest Stearns Teaching Foundation
A.B. Wabash College; A.M. Brown
- ELIZABETH KRUMPE (1981)
House Counselor; Hostess at Cooley House
B.A. Radcliffe; M.A. Harvard
- DOUGLAS J. KUHLMANN (1983)
Instructor in Mathematics
B.S. St. Louis University; M.A., Ph.D. Northwestern
- MICHAEL J. KUTA (1983)
Instructor in Physical Education; Head Athletic Trainer
A.S. Berkshire Community College; B.A. Northeastern
- PETER LAWNER (1985)
Graham House Psychologist
B.A. Harpur; Ph.D. University of Connecticut
- CORNELIA W. LeMAITRE (1983)
Director of Annual Giving
B.A. Newton College of the Sacred Heart
- ROBERT ANDREW LLOYD (1962)
Instructor in Art on the Independence Teaching Foundation Endowment
B.A. Harvard; M.Arch. Harvard Graduate School of Design
- SUSAN McINTOSH LLOYD (AA 1968)
Instructor in History and the Social Sciences and Music on the Marguerite Capen Hearsey Instructorship; Director of Urban Studies Institute
A.B. Radcliffe; M.A.T. Harvard

Faculty

PETER A. LORENCO (1983)

Instructor in Music

JOHN RICHARD LUX (1949)

*Instructor in Mathematics on the Walter Scott
Leeds Teaching Foundation*

B.S. Pennsylvania State University; M.S.Ed.
University of Pennsylvania

THOMAS TOLMAN LYONS (1963)

*Instructor in History and the Social Sciences
on the Independence Teaching Foundation*

B.A., M.A.T. Harvard

NORMA JEAN MABRY (1983)

Instructor in French

B.A. Middlebury

HARRISON FAIRFIELD McCANN (1976)

President, School Year Abroad

B.A. Williams; M.A. Middlebury

REBECCA D. McCANN (1977)

*Chairman Spanish Department, Instructor in
Spanish*

A.B. Lake Erie; M.A. Middlebury

KAREN L. MCCARTHY (1985)

Athletic Trainer

B.S. East Stroudsburg

MARY J. MCCARTHY (1978)

Instructor in Art

A.A. Bay Path Junior College; B.A. William
Paterson College

SUSAN R. McCASLIN (1977-1981, 1985)

Instructor in Religion and Philosophy

A.B. Smith; M.T.S. Harvard Divinity

JOHN CLAIBORNE McCLEMENT (1952)

Instructor in Mathematics on the Cecil F.P.

*Bancroft Foundation; Director of Financial
Aid*

A.B. Yale; M.Ed. University of Pittsburgh

THOMAS E. McGRAW (1983)

Instructor in English

B.A. Notre Dame; M.S. Boston University

DAVID WILBUR McKAIN (1984)

Roger Murray Co-Writer in Residence

B.A., M.A., Ph.D. University of Connecticut

JEAN CRAWFORD McKEE (1974)

Admission Coordinator

B.A. Middlebury

PETER QUACKENBUSH McKEE (1947)

*Associate Headmaster; Chairman Physics
Department; Chairman Science Division;
Instructor in Physics on the Donna Brace
Ogilvie Teaching Foundation*

B.A. Middlebury; Ed.M. Harvard

JOHN KENNEDY McMURRAY (1968)

Chairman Art Department; Instructor in Art

B.A. Washington and Lee; M.A.T. Harvard

BRITTA S. McNEMAR (1981)

Director of Summer Opportunities

A.B. Connecticut College; M.S. Ed. Univer-
sity of Pennsylvania

DONALD W. McNEMAR (1981)

*Headmaster on the Foundation in honor of John
P. Stevens, Jr.; Instructor in History and the
Social Sciences*

B.A. Earlham; M.A., Ph.D. Princeton

JOSEPH CALLENDER MESICS (1982)

Secretary of the Academy

B.S. Yale; J.D. Dickinson

CHARLES SPENCER MILLER (1982)

Instructor in English

B.A. Dartmouth

MARY SOPHIA MINARD (AA 1961)

*Instructor in History and the Social Sciences,
Co-Director of Community Service Program*

B.A. Smith; M.A.L.S. Wesleyan

RONN NELS MINNÉ (1965)

*Instructor in Chemistry on the Martha Cochran
Foundation*

B.S., A.M. Northwestern; Ph.D. Harvard

VINCENT JOSEPH MONACO (1984)

Instructor in Music

B.Music Ed. University of Massachusetts;
M. Music Boston University

ELIZABETH ELLEN MOORE (1984)

Admission Officer

B.A. Mount Holyoke

CLEMENT MORELL (1958)

Instructor in Mathematics

B.A. Northern Michigan; M.A. University
of Michigan; M.S. University of Illinois

HERBERT HARRY MORTON III (1975)

Registrar; Instructor in Mathematics

A.B. Dartmouth

ROBERT ADAMS MOSS, JR. (1984)

Instructor in French

B.A., M.A. Trinity

THYLAS MOSS (1984)

Instructor in English

A.B. Oberlin; M.A. University of New
Hampshire

EMILIO MIGUEL MOZO (1984)

Instructor in Spanish

B.A. Sir George Williams University; M.A.
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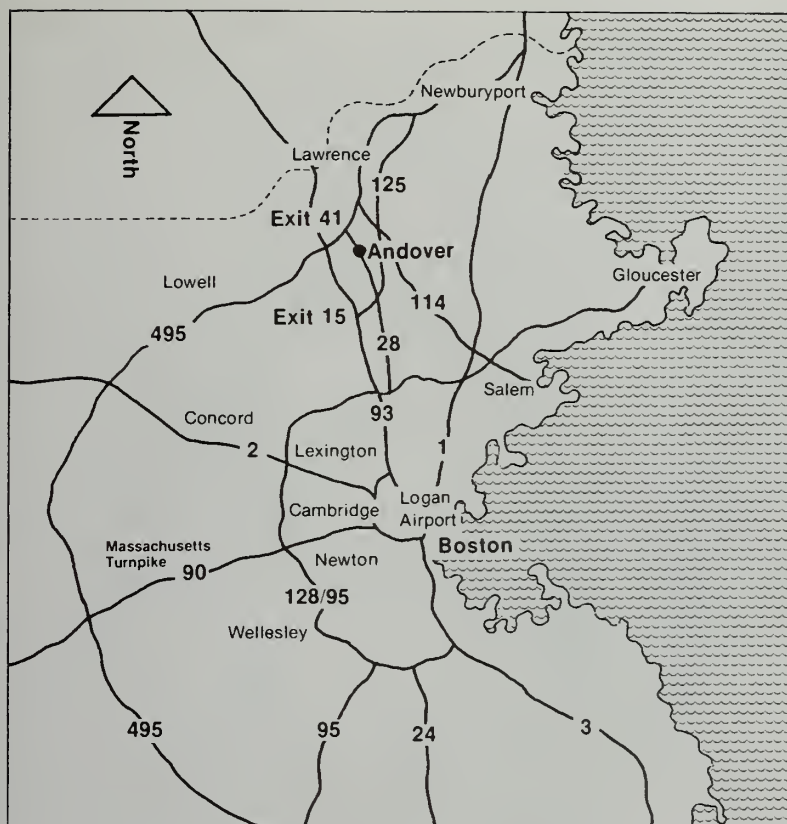
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TRAVELING TO ANDOVER

If traveling by car from Boston, take Route 93 north for about 19 miles. Take Exit 41, then turn right (east) on Route 125 for 2 miles. Turn right onto Route 28 and go north about 4 miles to the Andover campus. Turn right at the Bell Tower on the corner of Route 28 and Salem Street. The Admission Office is the first building on the right.

If driving from Logan Airport, follow the signs to Boston via the Sumner Tunnel and follow Route 93 north signs.

From Route 495 north or south take Exit 41A marked Andover and proceed south on Route 28 through the town of Andover. The Phillips Academy campus is approximately one mile south of the Andover center. Turn left on Salem Street, by the Bell Tower.

Merrimack Transportation Co. runs buses to Andover from the Transportation Building in Park Square, Boston. Visitors should call the bus terminal at (617) 686-2777 for up-to-date information.

Inns and Motels in the Area

Andover Inn
Chapel Avenue
Andover
(617) 475-5903

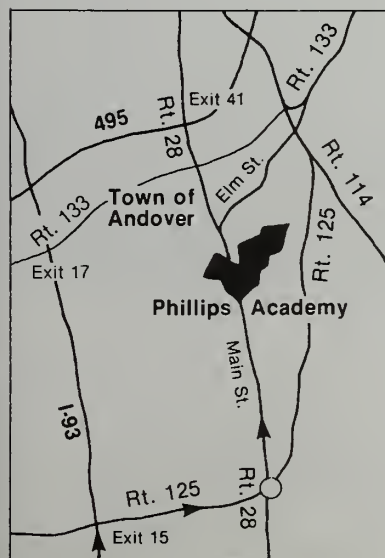
Holiday Inn
Winthrop Avenue
Lawrence
(617) 686-9411

Koala Inn
River Road
Andover
(617) 685-6200

Shawsheen Manor
No. Main Street
Andover
(617) 475-8370

Sheraton Rolling Green Motor Inn
Lowell Street
Andover
(617) 475-5400

Hendricks' Bed and Breakfast
(617) 475-3698





INDEX TO BUILDINGS

- | | | | |
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| 7 | Alice T. Whitney House* | 53 | Morse Hall (Mathematics) |
| 8 | Alumni House* | 54 | Morton House* (Alumnae) |
| 9 | Phillips Hall | 55 | Nathan Hale House* |
| 10 | America House* | 56 | Newman House* |
| 11 | Andover Cottage* | 57 | Newton-Hinman House* |
| 12 | Andover Inn | 58 | Nineteen Twenty-Four House |
| 13 | Arts and Communications Center | 59 | Office of Physical Plant |
| 14 | Bancroft Hall* | 60 | Oliver Wendell Holmes Library |
| 15 | Bartlet Hall* | 61 | Park House* |
| 16 | Benner House (Art) | 62 | Paul Revere Hall* |
| 17 | Bertha Bailey House* | 63 | Pearson Hall (Classics) |
| 18 | Bishop Hall* | 64 | Pease House* |
| 19 | Blanchard House* | 65 | Pemberton Cottage* |
| 20 | Borden, Memorial and Abbot Gymnasiums | 66 | Phelps House* |
| 21 | Bulfinch Hall (English) | 67 | Power Plant |
| 22 | Burt House* | 68 | R.S. Peabody Foundation and Archaeological Museum |
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| 25 | Chapin House | 71 | Samuel Phillips Hall (History and Modern Foreign Languages) |
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| 38 | Evans Hall (Science) and Office of Academy Resources | | |
| 39 | Flagg House* | | |
| 40 | Foxcroft Hall* | | |
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*Dormitory

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**1986-87
Andover
Course of Study**

Phillips Academy



Course of Study 1986-1987

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Course of Study

The curriculum of Phillips Academy comprises a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Placement in the year-level of a subject may be independent of a student's grade in school; through advanced placement at entrance or accelerated courses, many students fulfill requirements ahead of the normal year, thereby gaining increased opportunity for college-level or other elective courses. Instruction is given in all subjects usually required for entrance to higher institutions.

Classroom groups are small enough to permit individual attention, and students are placed in sections fitted to their skill level. Accelerated sequences and advanced courses offer particularly able and well-prepared students opportunity to progress at a rate commensurate with their ability and ambition. Most departments offer courses beyond the level of preparation for college.

For full membership in a given class, students should have credit for the work of the lower classes or its equivalent. However, students are rated as members of a given class if their deficiencies for full membership in it do not exceed a certain number of trimester courses.

Every student is assigned to an Academic Advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements, and the student's particular interests. Students should familiarize themselves with the Academy's basic curriculum—both its requirements and its flexibility.

Members of the Upper Middle and Senior classes should become aware of the entrance requirements of the colleges they may wish to enter.

The Trimester Plan

The academic year is separated into three trimesters. There are two types of weekly class schedules: one during which classes meet only Monday through Friday, and the other during which classes also meet on Saturday morning. There are roughly equal numbers of these five and six-day weeks in each trimester. Within a given week classes are

scheduled to meet according to varying patterns: some for four fifty-minute periods; others for five such periods; and a few seminar and studio courses for two two-hour blocks. Many departments offer yearlong courses as well as those which are term-contained (completed in one trimester). The diploma requirements are stated in terms of full-year courses or trimester courses, depending on the academic area involved.

Special courses in Foreign Languages

Special courses covering the work of two years in one are open to qualified Seniors in Chinese, German, Greek, Italian, Latin, Russian, and Spanish. These 10-20 courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and therefore are not recommended for students of limited language ability. Entering Seniors with no previous foreign language experience must pass a 10-20 course as a diploma requirement.

Accelerated Sequences and Advanced Placement

The Andover curriculum offers accelerated sequences in most departments. It provides special programs in Latin, Greek, and the modern foreign languages, designed to cover four years' work in three—or five years' work in four. The programs are open, on invitation of the departments, to especially able and ambitious students.

A large number of Phillips Academy students take College Board Advanced Placement Tests in May to establish advanced placement in college courses or credit toward the college degree.

Advanced Placement Examinations are offered in: American History, Art History, Biology, Chemistry, Computer Science, English, European History, French, German, Latin, Mathematics, Music, Physics, Spanish, and Studio Art (portfolio).

Independent Projects

With the approval of the Dean of Studies and in accordance with requirements established by the Faculty, a student may substitute independent work for some portion of the normal course load. An independent project may replace a given course for up to three trimesters of a student's stay at the Academy, or may replace all courses during

a given trimester. In either case, the work is done under the supervision of a member of the Faculty.

Off-Campus Programs and Projects

The school offers several off-campus residential programs. The *Washington Intern Program*, in which Andover joins with Exeter, allows a group of Upper Middlers and Seniors to spend the Spring Term living together in Washington and working in the offices of U. S. Senators and Congressmen. (See *History 300*.)

Selected students enrolled in Spanish at the third level or higher may elect a residential Winter Term of study in Mexico (see *Spanish 35*), or in Barcelona, Spain, as part of an exchange program.

Selected students of French may participate in a Fall Term exchange in Paris, France, or may spend the Winter Term in Antibes, France, attending local schools and living with a family in the city.

In addition to school-sponsored programs, the trimester plan provides an opportunity for individual Seniors to arrange off-campus projects related to their special interests. Some Seniors have worked as interns with officials in local government and members of the Massachusetts legislature. Others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative in the investigation of opportunities and careful planning of a course of study that will meet diploma requirements and also free a block of time during the appropriate term. Participation in any off-campus project or program must be approved by the Dean of Studies.

School Year Abroad

Students may elect to spend their Upper Middle or Senior Year studying in France or Spain with *School Year Abroad*, originated as an off-campus program by Andover, later joined as a sponsor by Exeter and St. Paul's. Students live with host families, while pursuing a course of study under the supervision of teachers from the three original sponsoring schools. Although *School Year Abroad* is now an independent program, it provides students with courses that earn full academic credit at Andover and with the experience of immersion in a foreign culture. Students wishing to participate should

consult their Academic Advisor and the *School Year Abroad* office (located in Samuel Phillips Hall on the Phillips Academy campus) for guidance in the selection of courses for the years prior to and following the year abroad.

The Mountain School Program

The Mountain School Program of Milton Academy is a semester-long program for eleventh graders which offers students the opportunity to enjoy a different living and learning experience on a 300 acre farm in Vermont. Phillips Academy students may participate Fall Term only. Students will continue their academic courses in addition to activities which will emphasize practical skills and crafts. Students will work on The Mountain School farm which supplies most of the food and heat for the school.

Summer Session

The *Andover Summer Session* is a six-week academic enrichment program for boys and girls of high school age. Students who wish to receive Phillips Academy credit for courses taken at the *Andover Summer Session* must receive prior approval from the chairman of the department involved.

Planning a Program of Studies at Andover

The following is designed to help Andover students and their parents to understand the curriculum, and to show the major decisions, and their consequences, which face students at each stage of the four-year academic program.

Workload

All new students are advised to carry only a normal program of five courses each term in the Junior, Lower Middle, and Upper Middle years. The requirement for the Senior year is four courses or the equivalent of the fourth course—that is, independent work equivalent to a course. Upper Middlers and Seniors may elect to adjust their workload by carrying four courses or five courses in any trimester during their last two years as long as the total for the two years comes to twenty-seven trimester units.

Academic Advising

Each student has an Academic Advisor; this member of the Faculty is responsible for counseling the student in the planning of his or her course of study at Andover. The Advisor meets with the student during the Orientation period prior to the opening of school in September to review the course selections which the student has made during the previous Summer or Spring. The Advisor must approve the selections for the Fall Trimester at this time, and those for the Winter and Spring Trimesters, respectively, during conferences held later in the year.

Within the diploma requirements, programs of study are determined by the student's long-range needs and aspirations—insofar as these can be identified. These needs may include college and career plans, strengths and weaknesses as revealed by previous performance and aptitude tests, and character and personal development.

In addition to the Academic Advisor, the House Counselor or Day Student Counselor must also approve the student's course selection for each trimester. From time to time during the academic year, the Counselor will report to parents concerning the student's growth and progress. Late each spring students in the three lower classes and their respective Academic Advisors will prepare a selection of courses for the coming year; a copy of this selection will be mailed to parents in June.

Although the student is ultimately responsible (within the Diploma Requirements and other guidelines and policies of the Faculty) for the selection of his or her courses, the Academic Advisor will welcome any information and suggestions that parents may wish to offer.

Diploma Requirements

The basic diploma requirement is the satisfactory completion of a four-year secondary school program, of which at least three trimesters must be at Andover; the student must be in good standing (not on Probation or under Suspension) at the time of graduation. A student who has been dismissed is ineligible for a diploma unless readmitted.

A student's required program normally includes nine trimester credits in a foreign language, eight in mathematics, three trimester credits in United

States History, plus an additional trimester course in history taken at the Upper Middle or Senior level, a full-year course in a laboratory science, one trimester of art (usually *Visual Studies-Art 10*), one trimester of music (usually *The Nature of Music-Music 20*), and nine of English — these to include *English 10* (for ALL entering Juniors), a yearlong course of competence in writing and reading and a three-trimester sequence of general literature. In order to be eligible for a diploma all students must satisfy the swim requirement of the Department of Athletics. Certain diploma requirements vary with the class level at which the student enters Phillips Academy. Entering Juniors and Lower Middlers must pass *Physical Education 10* in addition to required athletics; all three and four-year students must pass, prior to graduation, a one-trimester course offered by the Department of Philosophy and Religious Studies. Entering Upper Middlers need pass only one trimester of either art or music at the Academy. Entering Seniors are not required to take either art or music. Some modifications of the language requirement are made for entering Upper Middlers and Seniors. Entering Seniors with no previous foreign language experience must pass a 10-20 course in a foreign language. A Senior must *earn* a minimum of twelve graded trimester credits during the Senior year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Independent Projects are counted as graded courses.

Credits (trimester) required for the diploma are:

For Entering Juniors 54

For Entering Lowers 51

For Entering Uppers 48

For Entering Seniors 48

Newly Admitted Students

Students entering for their first year are sent placement material, including some forms for present teachers to complete and a self-administered diagnostic test in elementary algebra. These items are used by the Academy to aid in proper placement or recommendation of course levels. New students are also asked to complete to the best of their ability a Course Selection form, indicating the courses that they wish to take during the coming year. Although the placement material may alter some-

what a student's preliminary selections, it is helpful, for planning purposes, to know the levels that each student thinks he or she is ready to enter.

The Main Choices at Each Stage of a Four-Year Program

While a student's program of studies is adapted each year to his changing situation, the *future consequences* of each course should be noted, for certain choices in one year open the way to later options and may close the door to others.

Academic Program Guidelines

In order to promote both breadth and depth in students' academic programs, the Faculty has voted the following guidelines, which are in addition to the Diploma Requirements listed above. These represent what the Faculty *strongly urges* students to do. The Academic Advisors recognize that there will always be some acceptable student programs which do not follow these guidelines.

All Juniors and Lowers should take English, mathematics, and foreign language every term.

By the end of Lower year each four-year student should have taken some history and some science.

By the end of Lower year each four-year student should have taken *Art 10* or *Art 11*.

All Uppers should take English all year.

In their Upper and Senior years students should take a total of at least four trimesters of mathematics and physical science, with at least one trimester in each of these two areas.

All Seniors should take, during each term, a course in which they do some writing in the English language.

All students will be advised to take some science in addition to the present one-year requirement.

All three and four-year students will be advised to take more than the minimum diploma requirements in the arts (Art, Music, Theatre and Dance).

JUNIOR YEAR

Each trimester a Junior must take five courses, only one of which may be a Pass/Fail course. Students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring.

In selecting courses, students are reminded to check the diploma requirements. A Junior's program should resemble the following outline:

1. Math—enter the sequence by placement of the department;
2. Foreign Language—begin sequence (usually a year-long course at the 10-level);
3. English—*English 10*
4. Elective [Art, Classics, Computer, History,
5. Elective [another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]

LOWER MIDDLE YEAR

Each trimester a Lower Middler must take five courses, only one of which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. A few students take the CEEB Achievement Tests during the Lower Middle year. In selecting courses, students are reminded to check the diploma requirements. A Lower's program should resemble the following outline:

New Students

1. Math—(usually *Mathematics 19* or *Mathematics 21*);
2. Foreign Language—enter the sequence by placement of the department;
3. English—enter sequence (*Competence*);
4. Elective [Art, Classics, Computer, History,
5. Elective [another Math, another Language, Music, Physical Education, RelPhil, Science, Interdisciplinary, Theatre, Dance.]

Returning Students

1. Math—continue the sequence (usually *Mathematics 21, 22, 32*);
2. Foreign Language—continue the sequence;
3. English—continue sequence (*Competence*);
4. Elective [Art, Classics, Computer, History,
5. Elective [another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Theatre, Dance.]

N.B.

Students planning to be off-campus for a term (e.g., *Term in Mexico, Washington Intern Program*, etc.) **should make sure they have no yearlong courses during that year.** Students wishing to participate in the *School Year Abroad Program* during their Upper Middle year should discuss these plans with their Academic Advisor and seek guidance for the selection of courses for the Lower Middle Year. Participation in any off-campus project or program must be approved by the Dean of Studies.

UPPER MIDDLE YEAR

During the Upper Middle and the Senior Years, a student must accumulate a total of 27 trimester units in blocks of four or five courses per trimester. A Pass/Fail course may be elected as a fifth course only.

New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many students take the CEEB Preliminary Scholastic Aptitude Tests in the Fall; all take the CEEB Scholastic Aptitude Tests in the Winter; and many take the CEEB Achievement Tests in the Spring of their Upper Middle year. Some also take the CEEB Advanced Placement Tests in the Spring of their Upper Middle Year. As a matter of general policy Academic Advisors encourage "depth" in the selection of courses for the Upper Middle Year. Many students satisfy their United States History requirement during their Upper Year. In selecting courses students are reminded to check the diploma requirements. An Upper's program should resemble the following outline:

New Students

1. Math—enter the sequence by placement of the department;
2. Foreign Language—enter the sequence by placement of the department;
3. English—begin sequence (*Competence*);
4. Elective [Art, Computer, History, another
5. Elective [Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

Returning Students

1. Math—continue the sequence (usually *Mathematics 34*);
2. Foreign Language—continue the sequence;
3. English—continue the sequence (usually *Lit B (T2), Lit C*);
4. History—usually *History 300 (T2), 301 (The United States)*;
5. Elective [Art, Computer, another English, History, another Math, another Language, Music, RelPhil, Science, Interdisciplinary, Psychology, Theatre, Dance.]

N.B.

Students wishing to take an *Off-Campus Independent Project* for a trimester of their Senior Year **must have no yearlong courses during their Senior Year.** Participation in any off-campus project or program must be approved by the Dean of Studies.

SENIOR YEAR

During the Upper Middle Year and the Senior Year, a student must accumulate a total of 27 trimester units in blocks of four or five courses per trimester. A Pass/Fail course may be elected only as a fifth course; however, an Independent Project, though marked on a Pass/Fail basis, is counted as a graded course.

A Senior must *earn* a minimum of twelve graded trimester credits during the Senior Year. Seniors must have passing trimester grades for all courses taken during their Spring Trimester. Many Seniors retake the CEEB Scholastic Aptitude Tests in December and the CEEB Achievement Tests in January, and take the CEEB Advanced Placement Tests in May. In selecting courses students are reminded to check the diploma requirements. A Senior's program should resemble the following outline:

New Students

1. Math—enter the sequence by placement of the department; if the requirement is not yet satisfied enter *Mathematics 40*;
2. Foreign Language—enter the sequence by placement of the department if the requirement is not satisfied;

3. English—usually *English 300-12*;
4. Elective [Art, Computer, another English,
5. Elective [History, another Math, a 10-20
Language, Music, RelPhil, Sci-
ence, Interdisciplinary, Psycholo-
gy, Theatre, Dance.]

Returning Students

Usually most diploma requirements have been satisfied. Careful selection of electives for continued depth in the student's chosen areas is encouraged.

Transferring and Dropping Courses

To transfer or drop a course, a student must obtain an official transfer slip from his or her Academic Advisor. This slip is then taken *as soon as possible* to the Scheduling Officer in George Washington Hall. Transfers into term-contained courses must take place during the first six calendar class days of the term. No course may be dropped after the end of the fourth week of classes of any term. Students wishing to drop yearlong or T2 courses prior to the normal end of the course, and after the first six calendar class days of the course, may do so only by gaining the approval of a group of five: the Department Chairman, the Dean of Studies, the student's House Counselor, Academic Advisor, and Instructor. Credit is granted at the discretion of the Department Chairman and only if the student is passing the course at the time it is dropped and only for that portion completed. Yearlong and T2 courses are considered as long-term commitments.

Attendance

Students are expected to attend all academic classes.

Instructors, if approached in advance, are permitted (but not required) to excuse students from a class meeting if the absence from that meeting will not add to weekend time. Only Cluster Deans may give permission to extend weekend time, and they may do so without consulting Instructors.

Failed Courses

In most cases, continuing students may attempt to receive credit for a failed course by taking a make-up examination. Spring Term Senior Failures may be made up only following Commencement.

Personal Computers

Though there is no expectation that they do so, students are permitted to bring personal computers to the School and keep them in dormitory rooms (providing the monitor may not also be used as a television receiver). However, Phillips Academy can assume no responsibility for the care, security, or maintenance of these student-owned units. Further information concerning personal computers is available, upon request, from the office of the Dean of Residence.

College Entrance Examination Board Test Dates

Tests will be held on campus in 1986-87 as follows:

October 18	PSAT/NMSQT (<i>Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test</i>)
November 1	SAT/ACH
December 6	SAT/ACH
January 24	SAT/ACH
May 2	SAT/ACH
June 6	SAT/ACH
May 4-15	AP (<i>Advanced Placement Examinations</i>)

Key to Course Designation

A course number ending in "0" denotes a yearlong course (Example: *Math 10-0*). A number ending "123" indicates that the course is term-contained, but sequential, and may be taken for one, two, or three terms (Example: *Art 26-123*). A number ending in a single digit "1", "2", or "3" indicates a course, that is term-contained, but one that may be taken only once. (Example: *Music 20-2*). The designations 1, 2, and 3 indicate the trimester during which the course is offered: 1 = Fall; 2 = Winter; 3 = Spring. Some courses require a two-term commitment; they are indicated by a "(T2)" following the course name (Example: *Physics 52-12 Advanced Physics (T2)*). Check carefully each course description for any other limitations: Prerequisites, permission of instructor or department chairman required, etc.

Immediately below each course number is a 4-digit number in parentheses. This identification number (often referred to as the "computer number") is used for data-processing files and is re-

quired when a student registers for courses. The final digit of the computer number has roughly the same meaning as the last digit of the course number:

Final Digit: Indicates:

- | | |
|---|--|
| 0 | Yearlong course |
| 1 | Course offered in Fall Trimester |
| 2 | Course offered in Winter Trimester |
| 3 | Course offered in Spring Trimester |
| 4 | T2 course offered in Fall and Winter |
| 5 | T2 course offered in Winter and Spring |

Course Descriptions

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers a term-contained course as an elective.

25 Archaeology (Not offered in 1986-87)

Four prepared classes. Open to Upper Middlers and Seniors. Limit 15 students. The course explores the methods archaeologists use to reconstruct pre-historic societies and to test general statements concerning how and why these societies came to be the way they were. In doing this, several major transformations in human society are considered, beginning with the society of the earliest men, and ending with the first civilizations. Lecture and class discussions are supplemented by visual aids and work with archaeological specimens. A brief excavation may be conducted locally.

Art

The diploma requirement in Art is as follows: entering Juniors and Lowers must take a trimester course in a Studio Art; an entering Upper must take a trimester course in a Studio Art or Music at the Academy; neither a Pass/Fail course nor an Art History Course is accepted as fulfilling the requirement. The basic course, *Visual Studies*, covers a broad range of material, is open to students of all abilities and experience, and is a prerequisite to almost all elective courses in Art. Exemption from

this **prerequisite** is granted only on the basis of a portfolio of work judged satisfactory by the Chairman of the Department in collaboration with the teacher of the course which the student desires to enter. An acceptable portfolio should contain examples of two-dimensional work, three-dimensional work (slides or photographs are acceptable), and photography.

The College Entrance Examination Board offers students the opportunity to gain Advanced Placement in Studio Art in many colleges and Art Schools, thus enabling a student to by-pass basic design courses. Students must submit a portfolio of slides and original work to Princeton in May. Students interested in Advanced Placement should enroll in *Art 315-1* and two subsequent terms in Art.

Students wishing to apply for an independent project in photography will not be eligible until they have taken *Art 12*, *Art 26*, and two terms of *Art 306*.

With the exception of *Art 40* and *41*, no Art course, if failed, can be made up by examination.

Students should expect to help pay for art materials.

Cameras are available for loan to scholarship students taking photography.

INTRODUCTORY STUDIO COURSES

10—1 Visual Studies

(0101) Five prepared class periods. Not recommended for Juniors. In its emphasis on visual observation, interpretation, and organization,

the basic course is designed to provide an understanding of how visual information is made and transmitted. Along with discussion of design problems, the student receives experience in photography, drawing, two-dimensional design, and three-dimensional construction. Previous experience in art is not required.

10—2 (0102)
10—3 (0103)

11—12 Visual Studies for Juniors (T2) (a two-term commitment)

(0114)
11—23 (0115) Four prepared periods. Strongly recommended for Juniors. This course introduces students to the language of vision through drawing, photography, video, color, structure, and two- and three-dimensional design. Studio projects are co-

ordinated with visits to the Addison Gallery where students study original works of art that instruct and clarify their own art making activity. The course will fulfill the diploma requirement in art and will serve as the equivalent of *Art 10* as a **prerequisite** for other Art courses.

12—1 Introductory Photography

(0121) **Prerequisite:** *Visual Studies*. (*Art 10* or *Art 11*)

12—2 An introduction to basic out-of-doors photography, the course covers fundamentals of exposure, developing and printmaking. A camera (35 mm. or 2 1/4) with manually controlled speed, aperture and focus is required;

a light meter is not necessary. (Scholarship students may borrow cameras from the school.) Emphasis is on both darkroom technique and aesthetic quality. This course may be bypassed by students with previous experience through the presentation of a portfolio. Classes meet twice a week with six hours of preparation and weekly conferences with the teacher.

14—1 Introductory Ceramics

(0141) Four classes per week plus evening studios.

14—2 Basic techniques of hand-building, wheel-throwing, and glazing. Emphasis on the sculptural as well as the functional possibilities of clay. At least one raku firing each term, or a similar special project. No prerequisites, and does not fulfill the diploma requirement.

15—1 Introductory Design

(0151) **Prerequisite:** *Visual Studies*

15—2 (*Art 10* or *Art 11*). A course designed for students who, having completed *Art 10* or *Art*

15—3 *11* would like to continue in an Art course less specialized than the other electives available in Art. This course continues the

exploration of visual communication begun in *Visual Studies*, using a variety of media. Students work in several different forms of two- and three-dimensional art, exploring their relationships and developing some familiarity with the concepts dealt with in more specialized courses. Not open to Juniors.

INTERMEDIATE STUDIO COURSES

Unless otherwise noted, the intermediate courses consist of four prepared classes each week. *Visual Studies* (*Art 10* or *Art 11*) is a prerequisite for all intermediate courses. Any of these courses may be taken more than once to increase proficiency, as

the courses are designed to deal with individual needs.

20—1 Drawing and Two-Dimensional Design

(0201) **Prerequisite:** *Visual Studies* (*Art 10* or *Art 11*).

A course designed to develop drawing and two-dimensional composition skills. Drawing includes: life drawing, still life, and mono-printing. Two-dimensional design will deal with the organization of representational images, color, painting and collage. Continuation in *Drawing* (*Art 20-23*) or *Two Dimensional Design* (*Art 23-23*) in Winter or Spring is recommended.

20—23 Drawing

(0202) **Prerequisite:** *Visual Studies* (*Art 10* or *Art 11*).

(0203) A course designed to develop observation

and drawing skills in several media, based on the assumption that drawing is an end in itself as well as a skill basic to other media. Included: one life-drawing session each week. (Ms. Veenema and Mr. McMurray)

23—23 Two-Dimensional Design

(0232) **Prerequisite:** *Visual Studies* (*Art 10* or *Art 11*).

(0233) The course deals with one's ability to manipulate those elements most associated with the picture plane: color, line, shape, texture, and composition of flat materials. Work includes: 1) color—free studies and collages dealing with the structural and expressive nature of color; 2) drawing—exercises using pencil, pen, and brush, figure and landscape drawing; and 3) figure-ground—expanding the structural and illusionary aspects of figure-ground as an end in itself and as a basis for graphic and advertising design. (Mr. Shertzer)

24—23 Three-Dimensional Design (T2) (a two-term commitment)

Prerequisite: *Visual Studies* (*Art 10* or *Art 11*).

This course identifies some basic areas of concern—equilibrium, economy, function, scale—within an ecological frame of reference. Studio problems in design and construction will draw on the student's ability to learn and apply problem-solving techniques creatively; discussion and written exercises will ask the student to think about design as it defines the human enterprise. An introductory course in physics, chemistry or biology, taken previously or concurrently, will be helpful. (Mr. Lloyd)

26—123 Intermediate Photography

(0261) **Prerequisite:** *Art 12*. An extension of *Intro-*

(0262) *ductory Photography*, the course goes deeper

(0263) into technical proficiency and aesthetic quality. Technical aspects include metering tech-

niques, black and white filters, exposure and printing contrast controls, various developing styles and darkroom deviations. A camera and light meter are required. The student will be exposed to the works of various photographers so that he may gain a better sense of his own photographic style and identity. Classes meet twice a week with six hours of preparation and weekly conferences with the teacher.

27—13 Animation

(0271) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

(0273) An introduction to the art of illusion of motion through shooting still images frame by frame with 8mm sound motion picture film, with emphasis on making a very concise and carefully planned statement. Students may work in computer animation. (Mr. McMurray)

HISTORY OF ART COURSES

40—1 History of Art: Painting and Sculpture

(0401) Four prepared class periods. For Uppers and Seniors. Although a survey of Western Art from the cave painter to contemporary, the course examines four present-day directions by studying the historical styles as roots leading up to our time, with an emphasis on the 20th Century. (Mr. Bensley)

41—2 History of Art: Architecture

(0412) Four prepared class periods. For Uppers and Seniors. A survey of architecture and engineering from priestly civilizations to the present, the course emphasizes the architectural style as an expressive outgrowth of the culture that produced it. Combined with *Art 40-1*, this course should prepare students for the Advanced Placement Examination in Art History. (Mr. Bensley)

ADVANCED STUDIO COURSES

Visual Studies (Art 10 or 11) is a **prerequisite** for all advanced courses. These courses may be taken more than once. Unless otherwise noted, Advanced Studio courses meet four hours a week with four more hours required in the studio.

300—123 Graphics and Photography

(0701) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

(0702) Applying photography to graphic arts, particularly through photo-silkscreen, photo-etching, computer graphics, and photo-lith-

ography. Individual experimentation is emphasized in an attempt to carry the expressive force of photography beyond darkroom techniques. (Mr. McMurray)

302—123 Painting

(0721) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

(0722) An introduction to the basic elements and techniques of painting in oils. Specific problems are assigned to study the fundamentals of color, composition and space in painting, as well as to encourage the student's individual expression. Class critiques and discussions, slides, reproductions, and occasional field trips (depending on enrollment) are also part of the course. Previous experience is helpful but not necessary; students are encouraged to sign up for the full year if possible.

(0723) (Ms. Spatz-Rabinowitz)

303—13 Filmmaking

(0731) **Prerequisite:** *Introductory Photography (Art*

(0733) 12). This course explores both super 8mm motion picture and video techniques. Students will first script, storyboard, shoot and edit their own short film, then work on a group video project. (Mr. Bensley)

304—123 Advanced Ceramics

(0741) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

(0742) For those who are seriously interested in the total operation from design to execution. Hand-building, wheel-throwing, glazemaking (and some chemical analysis), responsibility for loading and firing electric, gas, raku, and salt kilns. Assigned reading and occasional field trips. Previous experience in clay is desirable. (Mrs. Bensley)

305—3 Printmaking

(0753) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

This course aims to give a student knowledge of different drawing techniques using printmaking media. Students work with metal plate etching and dry point techniques, collagraph, linoleum or wood block printing, and plate lithography. Printmaking media allows students to see the successive conceptual stages an artist goes through in developing an image and encourages them to look at the many possible forms their images could take rather than focusing on one final product. (Ms. Veenema)

306 Advanced Photography

Prerequisites: *Introductory Photography (Art 12) and Intermediate Photography (Art 26).*

- 306-I-13** Photojournalism. A photograph is a multi-dimensional experience. It can serve to recall
(0761) persons or events; it can inform, inspire, and
(0763) raise questions. It is a way of sharing an ex-

perience and one's relationship to it. The subject of this course is taking photographs that are deeply and personally felt and which, at the same time, can communicate to a wide audience. The commentary and images of several celebrated photographers will be presented for discussion. Projects will include individual photographs, essays, picture stories, journals, biographies, etc. While independent work is expected, some assignments will be given. (Mr. Wicks)

306-II-1 Large Format Photography. The special qualities of the large camera open up a new world of image making which alters the relationship of photographer to subject and creates options different from the smaller formats. View camera swings and tilts, perspective and depth of field control, sheet film processing, advanced metering and exposure methods, and techniques of the fine photographic print are covered. A survey of the aesthetic and stylistic development of photography in the nineteenth and twentieth centuries is taught. Students explore the many possible approaches to their own photography in this historical context. Extensive use is made of the Addison Gallery's collection of original photographs. Large format cameras are provided. (Ms. McCarthy)

306-III-2 Studio Photography. Concentrating on portraiture and fashion photography, studio strobes are used to achieve controlled lighting. Through various darkroom techniques and manipulation, along with individual experimentation, an attempt will be made to express personal ideas. Utilizing professional models from Boston agencies, the course is an introduction to commercial photography. (Mr. Bensley)

306-IV-3 Photoillustration. Communication of thoughts, feelings, and dreams in an imaginative and personal manner is the main goal of photoillustration. Through various darkroom techniques and manipulation, along with individual experimentation, an attempt will be made to express personal ideas. Initial projects will be assigned to enhance experimentation and problem-solving, followed by independent work to be presented sequentially in book format. The course includes group critiques and discussion of works by several photographers. (Ms. McCarthy)

308-123 Sculpture

(0881) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

(0882) Offers an opportunity to work in practically every material available to the sculptor today, including wood, stone, metal, plastics,

plaster, and others. It is therefore possible for students to develop into sculpture concepts discovered in *Visual Studies (Art 10)* or *Three-Dimensional Design (Art 24)* as well as ideas drawn from their own experience. Some outstanding work of recent classes includes the "avocado" by Seymour House '73, a thirty-foot welded construction which is now a permanent addition to the Underwood courtyard. Individual criticism is stressed. (Mr. Shertzer)

309-3 Kinetics

(0893) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

A search for the aesthetics of movement. Individual inventiveness is stressed as students pursue projects directed toward devices that produce implied or real motion. Self-perpetuated problem-solving situations become one of the prime values and objectives of the course. Projects range from simple mobiles and mechanical sculptures to computer graphics. (Mr. McMurray)

310-123 Architecture

(0901) **Prerequisite:** *Visual Studies (Art 10 or Art 11).*

(0902) For Uppers and Seniors. *Three-Dimensional Design (Art 24)* recommended, but not required.

The design of structures for human habitation involves a variety of basic considerations. In the fall, the course will concentrate on functional analysis of sheltered spaces and their organization. The winter term will survey methods of enclosing spaces at different scales and construction techniques, including some architectural detailing. The spring term will combine knowledge gained in the previous terms in a project or projects simulating the experience of architectural practice. The course fills the needs of students who are considering architecture as a field of concentration as well as of those who desire familiarity with the basics of environmental design. Although students are encouraged to take the course for three terms, each segment is planned to accommodate enrollment for that term alone. (Mr. Lloyd)

311-3 Contemporary Communications

(0913) Four prepared class periods. The course examines some of the bases of communication between and among people. Material includes fiction,

non-fiction, poetry, drama, motion pictures, and the visual arts. **Prerequisites:** Successful completion of a course in art, music, or theatre. The course engages in group projects aimed at public presentation. (Mr. Owen, Mr. Lloyd)

314—3 Calligraphy: The Art of Lettering by Hand
(0943) **Prerequisite:** *Visual Studies (Art 10 or Art 11)*.

Four prepared class periods. A course designed to develop basic techniques of fine hand lettering beginning with Roman capitals and tracing the historical developments of letter construction, integrating form and function. Practical applications can range from simple matter quotations to illuminated manuscript work. Applications of computer graphics are explored. (Mrs. Quattlebaum)

315—1 Advanced Placement in Studio Art
(0951) **Prerequisite:** *Visual Studies (Art 10 or Art 11)*

and two art courses. For Seniors who have taken at least two art courses beyond *Visual Studies*, and can be recommended by the teachers of those courses. This course is a seminar run via weekly critique sessions with instructor, and in which each student is expected to do at least nine hours of outside, independent work in preparation of her or his portfolio for Advanced Placement or for other use. A student enrolled in this course should plan to take at least one art course or project in Winter and Spring Terms. (Ms. Veenema)

Classical Studies

The Department of Classics offers the following courses in Classical Studies designed to provide Andover students a broad introduction to Classical Civilization through history, literature, mythology, and etymology. All courses are electives, open to the various classes as noted. The courses offered here require no knowledge of Greek or Latin. Courses in the Greek and Latin languages offered by the Department of Classics are described under Foreign Languages. For another course in Ancient History see *History 330--123*.

21—1 Classical Civilization: Greece

(5321) Four prepared class periods. For Juniors and

21—3 Lower Middlers. The course surveys the

(5323) achievements of the ancient Greeks from

Homeric times through Alexander the Great, including their impact on later civilizations in such areas as literature, art, philosophy, drama, government and science.

22—2 Classical Civilization: Rome

(5332) Four prepared class periods. For Juniors and Lower Middlers. The course introduces students to the civilization of Rome which dominated the Western World politically for a thousand years and culturally for even longer. The developing concepts of politics, law, and empire as we know them today are discussed. The course challenges the students to consider the meaning of the Roman experience in its glorious achievement of the "Roman Peace" as well as in its "Decline and Fall."

31—1 Etymology

(5411) Four prepared class periods. For all classes.

31—2 Training in the interpretation of English

(5412) words by systematic analysis of elements derived from Greek, Latin and other Indo-European languages. Exercises expand vocabulary and develop precision of expression and

31—3
(5413) understanding.

32—1 Greek Literature

(5421) Four prepared class periods. Open to all

32—2 classes. A systematic study of the master-

(5422) pieces of early European civilization as seen

in their proper literary, intellectual, and historical context. In what is essentially a history of ideas, the major *genres* of epic, tragedy, comedy, satire, history, erotic poetry, and philosophy are stressed as aspects of the wider evolution of early European thought which laid the basis for modern civilization. The major problems which still confront human life are explored through the writings of Homer, Aeschylus, Sophocles, Euripides, Herodotus, Thucydides, Aristophanes, Plato and others. (Dr. Pottle)

33—2 Classical Mythology

(5432) Four prepared class periods. Open to all

33—3 classes. The interest of the Twentieth Century

(5433) in Classical Mythology has stemmed

from three main sources: the psychoanalytical use of myth, progress in the field of classical archaeology, and anthropological study of myth. Preliminary exploration of the works of Freud in psychology, Schliemann and Evans in archaeology, and Frazer, Graves, and Levi-Strauss in anthropology leads to the detailed study of the myths of Oedipus, Theseus, and Agamemnon among others. The myths are considered living entities changing in the hands of each artist who deals with them whether it be Homer or Joyce, Aeschylus or O'Neill, an anonymous Greek vase painter or Dali, Euripides or Strauss. Works of literature, art, and music provide the core for the study of the use of myth in human life. (Mr. Krumpe)

English

The diploma requirements in English are to establish competence in writing and reading (normally by successful completion of the *Competence Course*), and to complete the *Literature Sequence* through *Literature C*. For those entering Seniors and Post-Graduates who must take *English 300*, the requirement is reduced by the appropriate number of trimesters. (Seniors and Post-Graduates are interviewed by the Department Chairman before the start of school and in some cases these students may be exempted from *English 300* to enroll in one of the 400 or 500 level English courses.) All new Lowers and Uppers enroll in *Competence*. Students entering the Junior Class must take the *English 10*. Juniors may not enroll in *Competence*.

The English Department also offers specialized courses for students who have already passed their competence and literature requirements and elect to continue studying English. Related courses, whose prerequisites vary, are listed elsewhere in this booklet: e.g., under Performing Arts, Interdisciplinary Courses, Classics Courses, and Modern Foreign Language Courses in translation. All English courses meet for four prepared classes a week, unless the course description states otherwise.

10—0 English

(1100) This course is required for all Juniors. As a foundation for the *Literature Sequence*, the course studies a variety of literary forms and styles. Frequent writing assignments, close reading of such texts as *The Odyssey*, *Great Expectations*, *Black Boy*, *The Tempest* and regular work with journal entries prepare the student for the *Competence* course in the tenth grade.

Juniors are also eligible to enroll in *Etymology*, which is described under *Classical Studies*.

Normal Required Sequence (2 years)

(For Lowers and entering Uppers only)

First year of sequence
Second year

Fall	Winter	Spring
	Competence	
Lit B (T2)		Lit C

(1200) Competence Course

The course is designed to teach basic skills in reading and writing. It enables a student to achieve the competence requisite for the literature sequence and the

specialized courses. The course is concerned with the recognition and use of the basic elements of a sentence, sentence patterns, punctuation, paragraph development and coherence, and the composition of unified exposition. The first term emphasizes writing paragraphs and short compositions; the second term includes multi-paragraph compositions and the documented report. The third term focuses on close and accurate reading of the short story and the poem and helps students develop the skill necessary to write about these works clearly and concisely. *Competence* also encourages the acquisition of important reading skills in conjunction with the study of writing. Passages composed by skillful writers are evaluated for organization, logic, point of view, tone, diction, transitional devices. Through the use of the summary sentence, the outline, and the summary paragraph, a student learns to reduce a passage to core ideas. Texts: *English Competence Handbook*; *Writing: What's the Point*; *Combinations for Competence*; *The Modern Tradition*, ed. Howard; *The Norton Anthology of Poetry*.

LITERATURE SEQUENCE

Lit B (T2) (a two-term commitment)

Lit B continues the shift in emphasis, begun in the third term of *Competence*, away from basic writing training to reading and writing about literature. Here students will choose a course centered in one of three modes: Comic, Tragic, or Mythic. Though the modes differ, the objectives of *Lit B* are common to all three: to develop the skills of literary analysis; to teach a sense of literary mode; to develop a sense of historical perspective; to teach the forms of the novel, the poem, the play; to develop a literary sensibility; and to apply analytical skills to the writing of papers.

(1224) Lit B—I (The Satiric View)

A study of verse and prose works that illustrate the nature, purposes, and techniques of satiric writings. Core Texts:

FALL TERM —*Huckleberry Finn*
Gulliver's Travels
Satire: From Aesop to Buchwald
 WINTER TERM—*Nineteen Eighty-four*
Canterbury Tales
Poetry from Satire: From Aesop to Buchwald
The Best of Simple

(1234) Lit B—II (The Tragic View)

This course examines the form and content

of a number of works in order to identify and define elements of tragedy that are fundamental to them. The works are arranged in approximate chronological order with a balance being sought in each term among the various genres. Techniques of literary analysis and critical appraisals of the reading are stressed in frequent written assignments. Core Texts:

FALL TERM —*Oedipus Rex*
Wuthering Heights
 Selected Poetry
 Selected Plays by Ibsen
 WINTER TERM—*A Novel* by Thomas Hardy
Heart of Darkness
 A work by Toni Morrison
 Selected Poetry

(1244) **Lit B—III (The Mythic View)**

The course explores mythic elements in a wide variety of works with the aim of developing a student's ability to respond to and write about literature. Core Texts:

FALL TERM —*The Bible* (selections)
The Oedipus Cycle
Heart of Darkness
Song of Solomon
Grimms' Fairy Tales
 Selected Poetry
 WINTER TERM—*Moby Dick*
Huckleberry Finn
 Selected Poetry

(1263) **Lit C**

An introduction to the study of Shakespeare. At least three plays will be read, one being *Hamlet*, with an emphasis upon close textual analysis.

SPECIALIZED COURSES

Specialized Courses are open to students who have successfully completed *Competence, Literature B* and *C*. Courses numbered in the 500s are more intensive and demanding than those numbered in the 300s and 400s. Each course has four prepared class periods a week, unless specifically stated otherwise. Only courses with sufficient enrollment will be given.

300—12 English

(1301) A special course for all post-graduates and
 (1302) one-year Seniors. Its purpose is to provide the writing and reading skills taught in *Com-*

petence as well as to expose students to substantial works of literature. While reading plays, poetry, short stories, or novels, students undertake intensive writing exercises and learn to write effective papers of greater length. (Mr. Miller, Mr. Smith)

401—123 Non-Fiction Writing

(1711) In this course writers will gain practice in
 (1712) these non-fiction modes: personal essay,
 (1713) analysis, argument, feature writing, and extended composition. There are daily writing assignments; class work focuses on student editing. The instructors assume that students entering the course write with grammatical and rhetorical competence. Students are encouraged to submit their work for publication in newspapers and magazines. (Mr. Gould)

403—123 Introduction to Writing

(1731) An introductory course to the writing of
 (1732) original stories, informal essays, and poetry.
 (1733) While examining examples of the genres mentioned, the student tries all these forms.

With written permission from the department chairman, a student may take this course before he has completed the normal Competence-Literature sequence. (Mr. Owen)

405—123 Literature of Two Faces

(1751) The relationship between American and mi-
 (1752) nority cultures. The course addresses one or
 (1753) two cultures in any given term. The instructors hope to introduce students to the myth, magic and hard realities of ethnic experience in this country. Authors students might read include Flannery O'Connor, James Baldwin, Gwendolyn Brooks, Leslie Marmon Silko, William Faulkner, June Jordan, N. Scott Momaday, Issac Bashevis Singer, Sonia Sanchez, Imamu Amiri Baraka and Maxine Hong Kingston. (Ms. Moss, Mr. Thorn)

407—123 British Writers

(1771) Through a selection of British poems, plays,
 (1772) and novels spanning several centuries, stu-
 (1773) dents will become acquainted with important themes and techniques of the great English literary tradition. Representative authors include Chaucer, Spenser, Milton, Pope, Fielding, Johnson, Wordsworth, Austin, Keats, the Brontes, Dickens, Tennyson, Hardy, Lawrence, Joyce, Woolfe and Green. (Ms. Fan, Mr. Gilbert, Mr. Joel, Mr. Thorn)

408—123 American Writers

(1781) A thematic and comparative study of the
 (1782) novel, drama, and poetry in America from

(1783) 1850 to the present. Representative authors are Hawthorne, James, Wolfe, O'Neill, Fitzgerald, Dos Passos, Hemingway, Williams, Faulkner, West, Styron, Agee, Cather, Wharton, Whitman, Frost, Cummings. (Mr. Cobb, Mr. Bardo, Mr. Bernieri, Ms. Moss, Mr. Price)

500—23 James Joyce

(1802) The first term is devoted to *Dubliners*, *A Portrait of the Artist*, and *Stephen Hero*, and Ellmann's *James Joyce*; the second to *Ulysses* and *Finnegans Wake* in part. The purpose of the course is to follow the development of Joyce's method and style and to develop the skill to read important and difficult works without the aid of study guides and other secondary material beyond the Ellmann. Although the course may be taken in either term, the student gains a better sense of Joyce's genius by enrolling for two terms. (Mr. Owen, Dr. Germain)

502—12 Irish Literature

(1821) The course will begin with a brief examination of Irish history and Celtic mythology in order to broaden our appreciation and understanding of the four major writers of the Irish Renaissance: Yeats, Joyce, Synge, and O'Casey. Throughout the term we will try to draw connections between Irish politics and literature, both during the Literary Revival and today, in Northern Ireland, where "the troubles" persist. (Ms. Stephens)

504—123 Man and God

(1841) The course considers man's search for meaning in what frequently seems to be an inexplicable world. Readings include: *King Lear*, Shakespeare; *As I Lay Dying*, Faulkner; *Long Day's Journey into Night*, O'Neill; *The Plague*, Camus; *The Fixer*, Malamud; *Crime and Punishment*, Dostoevski; *The Trial*, Kafka; *Wise Blood*, O'Connor; *Nine Stories*, Salinger; *The Birthday Party*, Pinter; *Alice in Wonderland*, Carroll; *Zorba the Greek*, Kazantzakis; *The Bluest Eye*, Morrison. (Miss St. Pierre)

508—23 Directions in 20th Century Drama

(1882) The close study of significant contemporary drama. The winter term focuses on the first half of the 20th Century and plays by Shaw, Chekov, Strindberg, O'Casey, Brecht, Pirandello, and Ionesco are read; the spring term starts with Beckett, and includes plays by Williams, Bolt, Pinter, Albee, Stoppard, and Shepard. (Ms. Braverman, Mr. Owen)

509—1 Shakespeare: The Man, The Times, The Theatre, The Plays

(1891)
509—3 The course focuses on six plays (representative histories, tragedies, and comedies), and the sonnets, as well as some biographical and historical readings. (Mr. Stephens)

510—123 The Short Novel

(1901) An examination of the novella, and the genre of the short story with concentration on some fifteen works of comparative literature, including, Chekov's *Ward No. 6*; Mann's *Death In Venice*; Lawrence's *The Fox*; Tolstoy's *The Kreutzer Sonata*; James' *The Beast in the Jungle*; Stendhal's *The Cenci*; Greene's *The Third Man*; Melville's *Billy Budd*; Stevenson's *Dr. Jekyll and Mr. Hyde*. (Mr. Bernieri, Mr. Gilbert)

512—123 Satire and Comedy

(1921) A study of both the theories and practice of satire and comedy, with emphases on the eighteenth century and the modern period. Works by authors like Pope, Swift, Sterne, Ben Jonson, Waugh, and Heller will be studied in conjunction with the visual art of Hogarth and Steinberg, and recordings of modern performers like Peter Cook, Dudley Moore, Mel Brooks, and Peter Sellers. (Mr. Regan)

513—123 Novel & Drama Seminar

(1931) The course concentrates on major works of literature since 1880, primarily on the works of Virginia Woolf, Henry James, David Storey, Franz Kafka, Flannery O'Connor, T.S. Eliot, Samuel Beckett, Eugene O'Neill, William Faulkner, Gunter Grass, Saul Bellow, Gabriel Garcia Marquez, Grace Paley, John Barth, Isaac Bashevis Singer, Robert Stone, Elie Weisel, Harold Pinter, Bertolt Brecht, and Vladimir Nabokov. Students study the "world" of each writer and compare it with that of the others. As a basis for the comparison with the classics of the past, they also study a Greek Tragedy and *The Brothers Karamazov*. Class periods are devoted to seminar discussions (often led by students) and critiques of student writing. Students regularly stage dramatic readings, cast and performed by the class. (Mr. Wise)

514—123 Creative Writing

(1941) A writing course in poetry and short fiction and the personal essay. Students may be asked to keep journals or to do short reading

assignments, but the primary emphasis is on the body of work the student creates during the term. Content varies from term to term according to the instructor. (Ms. Gibson, Mr. McKain, Mr. Gould)

515—123 Literature of the Quest

(1951) Focusing on the ancient pattern of the journey, the thresholds crossed and the vision obtained, the course asks students to interpret elements of the quest from a variety of perspectives. In the Fall Term readings include Socrates' *Euthyphro* and *Oedipus Rex*, the Abraham cycle, Beckett's *Waiting for Godot*, and Eliot's *The Waste Land*. The Winter Term considers the suffering encountered on the quest and explores themes from the gospel of Mark, *King Lear*, *The Great Gatsby*, Wiesel's *Night*, West's *Miss Lonelyhearts* and Flannery O'Connor's *Everything That Rises Must Converge*. The Spring Term questions the journey's end, reading the Amor and Psyche myth and *Alice in Wonderland*, comparing Jacob and Jesus and ending with two tragicomedies: *The Tempest* and *Who's Afraid of Virginia Woolf?* (Mr. Zaeder)

518—3 Spenser and Milton

(1963) Students read minor works of both authors as well as Spenser's *The Faerie Queene* (Books I-II) and Milton's *Paradise Lost*. (Mr. Kalkstein)

520—123 Images of Woman

(1971) This course will examine, through the study of literature, woman as she perceives herself and as she is perceived by others. It will explore works by both men and women writers and will focus on the constant and the changing image of woman in different literary periods. Readings will include: *Northanger Abbey*, Austen; *Jane Eyre*, Bronte; *Hedda Gabler*, Ibsen; *Measure for Measure*, Shakespeare; *The French Lieutenant's Woman*, Fowles; *The Awakening*, Chopin; *The Mill on the Floss*, Eliot; *The Scarlet Letter*, Hawthorne; *Surfacing*, Atwood; *A Room of One's Own*, Woolf; *Diving Into the Wreck*, Rich; *Song of Solomon*, Morrison; *Tell Me a Riddle*, Olsen; *As I Lay Dying*, Faulkner. (Ms. Fan, Ms. Braverman)

527—3 Chaucer and His Age

(1983) The sophisticated ingenuousness of the Middle Ages as seen in works by two of its greatest practitioners, Chaucer and the *Gawain*-poet. The focus of the course is a study of *The Canterbury Tales* in Middle English. *Sir Gawain and the Green Knight* will be read in translation.

528—2 Wit and Poetry in the Seventeenth Century

(1992) A study of the several types of concentrated,

witty poetry that dominated the early seventeenth century—the work of Donne, Jonson, Herbert, and Marvell—and of the profound effect that these poets have had on later poets like Hopkins and Eliot. Although the focus of the course is poetry, some of the background material is prose, from Elizabethan sources to the modern literary critics. (Mr. Zaeder)

The following Theatre courses, which are related to English studies, have no prerequisites: Theatre 22 (Public Speaking), Theatre 28 (Shakespearean Workshop), and Theatre 53 (Playwriting). Other courses related to English are Art 311 (Contemporary Communications) and, in the Interdisciplinary section, Basic Study Skills, Language Skills I & II, and Efficient Reading Skills.

Foreign Languages

Andover's requirement of at least three high-school years of an ancient or modern language rests on the firm belief that direct acquaintance, through language, with the spirit and people of other lands is a psychological and intellectual resource of inestimable value for each individual, for every country, and for our common world.

The diploma requirement is satisfied by completion of three trimesters at the 30-level reached through the regular sequence, or by one trimester of 40-level reached through the accelerated sequence. Placement of new students is based on their previous school record, on the questionnaire sent to them and their current language teachers in the Spring, and, when appropriate, on a personal interview with the language chairman at Andover. Details regarding various options and the diploma requirement as it is applicable to "incoming Uppers and Seniors who begin a new language at Andover" are available from the Registrar's Office.

With the exception of Italian (limited to Seniors), each of our languages, ancient and modern, may appropriately be started by students of any grade, Juniors (9th) through Seniors. Most Andover students continue their language study beyond the third year. Some study a second language in addition.

Small classes, flexible placement, and opportunities for acceleration assure that each student is in the optimum learning situation. In the case of modern languages, the foreign language is the lan-

guage of the classroom. In conversation, in reading, and in writing, the goal is direct communication in the foreign language rather than through translation. The classroom experience is expanded by the language laboratory; media resources (e.g., periodicals, radio broadcasts, movies); the staging of plays; club activities; language events and programs at Andover or nearby schools. At all levels of instruction attention is focused both on basic language skills and, increasingly, on the literature, history, and various art forms which reveal the people whose languages are being studied. For information on School Year Abroad and other opportunities to study abroad, students should see their language instructor or the chair of the Language Division.

Chinese

Although the Chinese language may appear mysterious to Western eyes and ears, it is actually no more difficult than any other to speak. With no conjugations, verb tenses or declensions there are some aspects which actually make it easier. To learn Chinese is to open a bridge to the Orient. Mandarin Chinese is the language of instruction. Emphasis in early courses is on listening and speaking skills. As more and more characters are assimilated the emphasis shifts to include reading and writing. Traditional texts are complemented by contemporary newspapers. Extensive use is made both of the language laboratory and of audio-visual material. Opportunity is available for qualified students to participate in our six-week study-travel summer exchange program in Harbin, China.

10—0 Beginning Chinese

(4410) Five prepared class periods. An introduction to modern spoken and written Chinese, stressing pronunciation and aural-oral facility, and including the reading and writing of characters.

10-20—0 Accelerated First and Second-Level Chinese

(4420) Five prepared class periods. Open to Seniors, and to Uppers with permission. An intensive yearlong course covering the essential material of both *Chinese 10* and *Chinese 20*.

20—0 Second-Level Chinese

(4440) Five prepared class periods. Emphasizes further development of aural-oral skills, making use of student-written dialogues and skits. Characters are introduced at a faster pace, and the basic text is supplemented by a character reader.

30—0 Third-Level Chinese (Not offered in 1986-87)

Four prepared class periods. More emphasis on reading comprehension, with discussion stemming from the readings. Basic text supplemented by graded readers on the lives of the philosophers Confucius and Mencius, the poets LiPo and TuFu, and the father of modern China, Sun-Yat-sen.

40—0 Fourth-Level Chinese

(4460) Four prepared class periods. Readings, in both traditional and simplified characters, are selected to stimulate interest in Chinese culture, ancient and modern. Topics in history, literature, and current events will serve as a basis for discussions and short compositions.

French

The French Department offers a six-year course of study. At all levels French is the language of the classroom, and in all courses the French Language is taught in a cultural context. The first two years emphasize basic language structures. The third year serves as a transition to advanced courses which offer in-depth study of the literature and civilization of the French-speaking world. Students are encouraged to supplement classroom study with travel and study in France and other French-speaking countries through participation in programs such as School Year Abroad, the Antibes and Paris exchange programs, a class trip to Québec (*French 45-3*), and summer programs. Information on these programs may be obtained from the Modern Language Office.

10—0 Première année

(4010) First-year French for students who have had no previous courses in the language. Five prepared class periods. Listening comprehension and the use of basic conversation patterns of French speech are emphasized. Elementary grammatical and idiomatic structures are introduced as well as appropriate reading material. Students make use of the language laboratory.

11—0 Premier niveau

(4030) First level French. Five prepared class periods. This course is designed for the student who has had previous instruction in the language, but whose knowledge and skills are not secure enough for entrance to a second-level section. It is also appropriate for students with experience in other languages who wish to begin the study of French. The course emphasizes the development of oral-aural skills and prepares for French 21 the following year. Students who demonstrate unusual aptitude and interest are invited to enter French 22, the second level accelerated course.

21—0 Deuxième niveau

(4060) Second level French. Five prepared class periods. For students who have completed French 10 or French 11 and for new students who qualify through teacher recommendations or placement examination. While continuing to develop aural-oral skills, the course involves reading non-technical French prose and writing simple compositions. Text: *Encore Une Fois*, Herbst, Sturges.

22—0 Cours accéléré. Deuxième niveau

(4070) Accelerated second level French. Five prepared class periods. Upon successful completion of this course, students are recommended either for fourth level or for two trimesters of the third level sequence to be followed by a single-trimester fourth level course. Text: *La Grammaire à L'Oeuvre*, Barson. *Le Petit Nicolas*, Goscinny.

Third-Level Courses

A two-trimester departmental Conversation and Composition course is followed by a trimester course which creates a transition to more specialized studies.

Conversation et Composition

Four prepared class periods. Students gain practice in conversation and composition in a course which stresses the development of all four basic language skills: listening, speaking, reading, writing. The focus of the course may be chosen between the following options.

30—12 Conversation et Composition: Réalités.

(4094) (T2) (a two-term commitment).

Activities and discussion spring from authentic documents of everyday life, from tickets and schedules to magazine articles. Emphasis will be placed on writing for practical purposes.

31—12 Conversation et Composition: Fictions. (T2)

(4104) (a two term commitment).

Provocative short works of fiction are the starting points for discussions and for assignments in imaginative writing.

Cours spécialisé

Four prepared class periods. Each third trimester course involves learning about a particular subject in French, with language review supplied as needed. Whereas any one of the seven courses offered below could fulfill course objectives for all students, the Department prefers to offer variety, with the understanding that student choice can be accommodated only to the extent that overall enrollment permits.

32—3 Le village français

(4113) Using, as points of departure, the impressions and misimpressions which French and Americans have of each other's culture, this course attempts to give the student a better understanding of the French people and their institutions as reflected in the microcosm of a town. With the student's hometown as a basis of comparison, several French towns are examined in depth, including the provençal towns of Roussillon and Cassis and a town of the student's own choice. The basic text, Wylie, *Village en Vaucluse*, is complemented by readings, lectures, original documents, and both national and regional newspapers and magazine articles.

34—3 Le roman

(4133) A particular novel is read and discussed during the term. (Novels selected in the past have included Sartre, *Les Jeux sont faits*, Camara Laye, *L'Enfant Noir*, Vercors, *Le Silence de la Mer*.)

36—3 Le cinéma

(4143) Usually one work of fiction is studied along with two or more films. The books and films for the course vary from year to year.

37—3 Le journalisme

(4153) Students study current examples of French journalism for discussion of contemporary issues, and for the better understanding of the nature of journalism and of the culture represented.

38—3 Contes

(4163) Francophone literature abounds in examples of the tale, from the fairy tales of Perrault and folk tales of various francophone countries to the

satirical tales of Voltaire. This course will offer an overview of the genre, while concentrating on particular examples.

39—3 Le théâtre

(4173) An active participation course in which the student follows one play from the initial reading through its final production, taking part in each of the four major phases: reading, analysis, production, performance. (Plays presented in the past have included Camus, *Le Malentendu*, and Ionesco, *La Cantatrice Chauve*.)

40—123 La civilisation française

(4191) Four prepared class periods. The course,
(4192) consisting of three term-contained units,
(4193) deals with aspects of French civilization such as cultural stereotypes, history, cuisine, women's roles, and francophone cultures. Students increase their practical vocabulary through discussion of texts, films, and videotapes.

41—2 Le monde francophone en dehors de l'Europe

(4202) Four prepared class periods. As an international colonial power France spread her culture throughout the world. The course studies the civilizations of West, Equatorial, and North (Arab) Africa as well as the French civilization of the Antilles (Haiti, Martinique, and Guadeloupe). In addition to geographical, social, and historical study, the course will include the following reading: J. Roumain, *Gouverneurs de la rosée*; Aimée Césaire, *La tragédie du roi Christophe*; F. Oyono, *Le vieux nègre et la médaille*.

42—0 Littérature française

(4210) Four prepared class periods. Emphasis is placed on class participation, vocabulary building, close analysis of major literary works, and learning to write about literature.

44—1 Cours avancé de conversation et de phonétique

(4231) Four prepared class periods. Intended for students who understand, read and write French well and who already speak at a competent level, but who need further drill in conversational patterns and idiomatic expression. Diction, elocution, and intonation are also stressed through role-playing, speeches, and debates.

45—3 Québec et les Québécois

(4243) Four prepared class periods. Some amount of theory is balanced with observation and analysis of everyday life in Québec province to understand its political, economic, and social institutions, and such areas as religious, educational, and artistic life. Emphasis is on a close study of the media of Québec as well as personal involvement through liaison with Québec schools, students and newspapers, and through contact with French-speaking areas of Massachusetts and New Hampshire. The course may culminate in a trip to Québec.

51—123 Cours avancé de langue

(4261) Five prepared class periods. A course designed to meet the requirements of the Advanced Placement Examination in French Language. Open to students who have completed three terms of fourth-level French and to qualified new students. Emphasis is placed on vocabulary, conversation, composition, and reading, not only in literature, but in current newspapers and periodicals. The choice of texts is determined by the class and the instructor.

52—0 Cours avancé de littérature

(4270) Five prepared class periods. Open with departmental permission, to students who have completed three terms of fourth-level French and to others who are properly qualified. Primarily a seminar in which students discuss their interpretations of the works studied, the course also includes lectures and instruction in *explication de textes*. Preparation for the Advanced Placement Examination in French Literature includes the close reading of texts such as: La Fontaine, *Fables*; Racine, *Phèdre*; Beaumarchais, *Le Barbier de Séville*; Flaubert, *Un Coeur simple*; poetry of Apollinaire, and Baudelaire.

60—123 Littérature moderne

(4281) Two prepared class periods plus one weekly
(4282) (90 minute) seminar. Open to students who
(4283) have completed fifth-level French or the equivalent. The course studies selected novels and dramas representative of modern era. Emphasis is on particular writers and what they add to our understanding of the human condition in our times. Authors studied may include: Proust, Gide, Colette, Malraux, Mauriac, Aragon, Saint-Exupéry, Giono, Anouilh, Giraudoux, Aymé, Camus, Sartre, de Beauvoir, Hébert, Laye and Senghor.

(9001) Projets indépendants**(9002)** Qualified Seniors may undertake independent**(9003)** study projects in French under the direction of a faculty supervisor. Those who

wish to do apprentice teaching during either the Winter or the Spring Term will study the techniques and methods of modern language instruction and will practice, under careful supervision, in beginners classes. Apprenticeships are usually undertaken along with a program of independent reading and writing in French. (By departmental permission.)

German

A major world language whose cultural heritage has enriched western civilization for centuries, German has won a new relevance and vitality through its predominance in high technology and commerce. As the only Germanic language taught at the Academy, it also offers the student unique insights into the Anglo-Saxon roots of English, its sibling. The Department offers a 5-year course of study with the purpose of developing the ability to understand spoken German and to speak, read and write German with facility. Students who demonstrate unusual aptitude and interest are invited into the accelerated sequence. Consistent with its commitment to the spoken language, the Department holds oral as well as written examinations each trimester. In some courses theater is used to enliven speech development and cultural immersion. Students are encouraged to supplement their on-campus language experience through a winter or spring trimester of study in Germany, as arranged individually through the Department and the Dean of Studies.

10—0 First-Level German

(4300) Five prepared class periods. The beginning course develops aural comprehension and oral expression, as well as a foundation in the basic grammar. Current text: *Deutsche Sprachlehre für Ausländer*, Schulz-Griesbach.

12—23 Accelerated First-level German (T2)

(4305) Five prepared class periods. This course is for especially competent members of *German 10* upon recommendation of their instructor. Successful completion of 12 allows students to advance to 22. Current

texts: *Deutsche Sprachlehre für Ausländer*, Schulz-Griesbach; *Kindergeschichten*, Bichsel.

10-20—0 Accelerated First and Second-Level German

(4310) Five prepared class periods. A yearlong introductory course whose goal is to cover the essential material of first and second-year German, 10-20 is particularly suited to students who have already fulfilled the diploma requirement and desire proficiency in another language. For Seniors, and for Uppers with permission. Current texts: *Deutsche Sprachlehre für Ausländer*, Schulz-Griesbach; *Kindergeschichten*, Bichsel; supplementary materials.

20—0 Second-Level German

(4320) Five prepared class periods. The study of grammar and basic patterns is continued. Reading and elementary writing are introduced. Current texts: *German Second and Third Years*, Reinert/Amsco; *Drei Männer im Schnee*, Kästner; selected readings and tapes.

22—0 Accelerated Second-Level German

(4330) Five prepared class periods. Open to competent students from 12 and to other qualified new students with permission. Successful completion of this course, which attempts to cover the essential material of second and third-year German, enables advancement to *German 40*. Current texts: *German Second and Third Years*, Reinert/Amsco; *Der Richter und sein Henker*, Dürrenmatt; *Biedermann und die Brandstifter*, Frisch; supplement readings and tapes.

30—0 Third Level German

(4340) Four prepared class periods. This course emphasizes grammar review, reading comprehension, vocabulary building, writing skills and oral expression in preparation for the College Board Achievement Exam. Current texts: *German Second and Third Years*, Reinert/Amsco; *Der Richter und sein Henker*, Dürrenmatt; selected readings and tapes.

40—123 Advanced German Language and Literature

(4351) Four prepared class periods. This course utilizes advanced German literary works as a basis for conversation and composition. Periodicals, tapes and films supplement the preparation for the Advanced Placement Examination. Current texts: *Die Physiker*, Dürrenmatt; *Siddhartha*, Hesse; *Tonio Kroeger*, Mann; *Draussen vor der Tür*, Borchert; *Fidelio*, Beethoven; *Interviews*, Inter Nationes; selected poems.

50—123 Fifth-Level German

(4361) Four prepared class periods. Open to students who have successfully completed 3

(4363) terms of fourth-level German or its equivalent, this course varies with the needs of the class but is usually a seminar in the analytical reading of modern German classics. There is frequent writing. A major term paper in German replaces the final exam. Authors currently read: Böll, Kafka, Kleist, Goethe, Mann and Brecht.

(9001) Senior Independent Project

(9002) A pass-fail course. Under the guidance of a Department member, a qualified Senior has the opportunity to do special work such as elementary teaching or study in an area of choice.

Greek

Through the study of Greek the Department of Classics offers students a direct entry into Greek literature, which is still unsurpassed in excellence. Students have traditionally studied Latin before going on to the study of Greek. However, Greek is not more difficult than Latin. The Greek alphabet is easily mastered in the first few class meetings, and students quickly discover that the Greek language has poetic and expressive qualities which stimulate the imagination and illuminate man's political and intellectual development. The regular sequence in Greek is *Greek 10*, *20*, *30*, and *40*, though Upper Middlers wishing to accelerate may want to consider *Greek 10-20* followed by *Greek 30*.

10—0 Greek, First Level

(5010) Five prepared class periods. The course introduces the student directly to the Classical Greek of Periclean Athens through a series of readings which present not only the vocabulary, forms and syntax of the language but also the thoughts, feelings and actions that exemplify the Greek genius. Though preliminary selections are necessarily simplified, within the first year students are reading excerpts in their original form from such works as Plato and the New Testament.

10-20—0 Greek, First and Second Level, Accelerated

(5020) Five prepared class periods. The course is open to Seniors and Uppers. It covers in one year the essential material of *Greek 10* and *Greek 20*: basic forms and structure, along with ample selected readings from Xenophon and Plato, as an introduction to Greek literature.

13—1 Introduction to Greek

(5031) Four prepared class periods. The course is

13—3 for students whose curiosity for the Greek language and literature has been aroused by their studies in other areas. For students

who plan some day to study Russian or German, this course provides an excellent introduction into the intricacies of a highly inflected language. The student is also treated to an inside preview of a literature which, over the centuries, has provided inspiration and models for the literature of the Western World. It is a term-contained course, but students wishing to continue with Greek will have the opportunity to do so.

20—0 Greek Second Level

(5040) Five prepared class periods. The course continues the format of *Greek 10*, with further systematic development of reading skills and control of vocabulary, forms and syntax through the medium of more advanced selections from the Greek masterpieces, always with the purpose of understanding the spirit of the people that produced them.

30—0 Greek, Third Level: *Iliad* and *Odyssey*

(5050) Four prepared class periods. Selected books of the *Iliad* and the *Odyssey*, and sometimes a play of Euripides. Students examine the nature of tragedy, heroism, and self-discovery

40—123 Greek, Fourth Level: History, Tragedy, Lyric

(5061) Four prepared class periods. In the Fall Term ancient concepts of justice and morality are examined through the works of Herodotus and Thucydides. Human tragedy is explored in a play of Sophocles or Euripides in the Winter Term. The Spring Term is devoted to the study of emotion and self-expression in the Greek lyric poets.

Italian

10-20—0 First and Second Level, Intensive

(4400) Open to Seniors, and to Uppers with permission. Five class periods. Three additional meetings (30 minutes), to be arranged, will take the place of 1/2 of the usual homework obligation on those days; these small sessions afford drill and spontaneity in understanding and speaking Italian. A college text is supplemented by selected readings, recordings, songs, and the libretti and music of Italian opera. (Dr. Pascucci)

Latin

Through the study of Latin the Department of Classics offers students a direct entry into Latin lit-

ture, which, as the universal language of church, court, and scholars throughout the formative years of modern Europe, can rightly be termed the mother tongue of Western Civilization and the surest index to its meaning.

10—0 Latin, First Level

(5110) Five prepared class periods. The purpose of the course is for students to learn to read Latin literature with discernment and pleasure. Students learn the basic forms and syntax through reading and oral drill. More advanced grammatical constructions (subjunctives, indirect discourse, and the ablative absolute) are introduced but not studied in depth. Attention is given to aspects of Roman civilization, word formation, and the influence of Latin on English. In addition there are readings from the literature of the Bible in Latin and some selections from Roman authors in English. The text is Lawall and Tafe, *Ecce Romani*, Books 1-3 (Longman).

10-20—0 Latin, First and Second Level, Accelerated

(5120) Five prepared class periods. For Upper Middlers and Seniors. A year-long accelerated introductory course covering the essential elements of *Latin 10* and *Latin 20*.

13—1 Introduction to Latin

(5141) Four prepared class periods. The course is

13—2 for students seeking an introduction to the

(5142) Latin language, or those whose studies in other languages (including English) have aroused their curiosity about the workings of languages (grammar, syntax and vocabulary). It offers special profit and fascination to students of French, Spanish, and Italian, since it illuminates much of what they already know by acquainting them with the mother language. For students who plan some day to study Russian or German it serves as an introduction to the workings of highly inflected languages. It is a term-contained course, but students wishing to continue with Latin will have the opportunity to do so. The text is Lawall and Tafe, *Ecce Romani*, Book 1 (Longman).

20—0 Latin, Second Level: Caesar, Ovid, Nero

(5150) Five prepared class periods. During the Fall Term the grammar and readings in Lawall and Tafe, *Ecce Romani*, Book 4 (Longman) are completed. In the Winter Term students read, in both Latin and English, Roman biography from the late Republic and early Empire. Selections of prose by and about Julius Caesar and Augustus as well as poems of love and mythology of Ovid are included. Students will find fascination in

the Spring Term studying the biography of the imperial orge Nero and Petronius' satiric account of a feast in Nero's time with the text, Balme, *The Millionaire's Dinner Party* (Oxford).

25—0 Latin, Second Level, Accelerated (Not offered in 1986-1987)

Five prepared class periods. Open to students who have completed *Latin 10* with high honors and to other qualified students, at the invitation of the Department of Classics. The course covers at an accelerated pace the essential work of *Latin 20* and the first half of *Latin 30*.

30—0 Latin, Third Level: Cicero, Vergil, Apuleius

(5170) Four prepared class periods. The swan song of the Roman Republic is heard through the study of the life of Cicero with readings in Latin and English from Cicero himself, Catullus, and Livy. Systematic review of grammar strengthens the student's Latin reading skills. The poetry of Vergil is introduced in the Winter Term with *Aeneid*, Book II, as well as readings from *Eclogues* and *Georgics*. In the Spring Term the student becomes familiar with life under the Empire through the social, religious, and literary elements of Apuleius' *Golden Ass* and Juvenal's *Satires*. The basic text is Gillingham and Barrett, *Latin: Our Living Heritage*, Book III (Merrill).

35—0 Latin, Third Level, Accelerated

(5180) Five prepared class periods. Open to students who have completed *Latin 25* and to other qualified students at the invitation of the Department of Classics. The course reads at an accelerated pace the essential work of the second half of *Latin 30* and the whole of *Latin 40*.

40—123 Latin, Fourth Level: Vergil, Suetonius,

(5191) **Catullus**

(5192) Four prepared class periods. The Fall Term is spent reading *Aeneid*, Book IV, the great tragic romance of Dido and Aeneas. The Winter

Term offers the contrast of the Silver Age prose of Suetonius' biography of the Emperor Claudius along with Seneca's *Apocolocyntosis*, a rude farce about Claudius' deification. The Spring Term focuses on the emotional lyric poetry of Catullus, the most romantic and accessible of the ancient love poets.

50—123 Latin, Fifth Level: Vergil, Tacitus, Pliny,

(5201) **Horace**

(5202) Four prepared class periods. In the Fall Term the students enter the world of Book I of Vergil's *Aeneid* examining his literary form and technique, the social and political dimensions of his

epic. The Winter Term takes up selections from Tacitus' *Histories* and *Annals*. Together with Tacitus' gripping study of hopelessness and disillusion in the decaying Rome of tyrants like Nero, students read from Pliny's letters, including his eyewitness accounts of the eruption of Vesuvius and the persecution of Christians. In the Spring Term students return to the Golden Age of Augustus through the lyric poetry of Horace, whose work displays flawless control of language and timeless ethical and moral ideals. Completion of the sequence of *Latin 30, 40, and 50* will qualify the student for the Advanced Placement Examination in Latin.

Russian

Communication in Russian and a knowledge of Russian culture are essential for productive interaction with the U.S.S.R. in technology and science, and for achieving controlled, responsible international relations. Before studying Russian, many consider it strange and difficult; but its alphabet and vocabulary have the same sources as English, and it follows the same principles of grammar. Continuous oral, visual and instructional use quickly makes Russian familiar and enjoyable. The Russian Department offers a five-year course of study. This well-established program ensures confident progress in speaking, aural comprehension, reading, and writing. At the upper levels, students use Russian word processors for their compositions. Students who demonstrate unusual aptitude and interest during the first term are invited to enter special accelerated sections in the second term. It is the policy of the Department to attain exclusive use of Russian in the classroom no later than the middle of the first year.

10—0 Introduction to Contemporary Russian

(4500) Five prepared class periods. A yearlong elementary course in speaking, listening, reading and writing. Texts: Kostomarov, *Russian for Everybody* (Rusky Yazyk-Moscow); reference materials.

12—23 Contemporary Russian (Honors) (T2) (a two-term commitment)

(4515) Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of the first trimester of *Russian 10*. Successful completion of 12 enables students to enter 22. Texts are essentially those of *Russian 10* and *Russian 20*.

13—3 A Short course in Beginning Russian

(4523) Four prepared class periods. Open to Seniors and Uppers. A term-contained introduction to speaking, reading, and writing Russian, using scientific, literary, and conversational text materials. This course enables students to feel comfortable with the somewhat different features of a Slavic language. It also gives a sound foundation for continuing courses in Russian language, history, and literature, whether at Andover or in college.

For another course related to Russian history and culture see History 338.

10-20—0 Intensive Contemporary Russian

(4530) Five prepared class periods. Open to Seniors, and to Uppers with permission. A yearlong accelerated introductory course covering two years in one. Texts: Kostomarov, *Russian for Everybody*; reference materials.

20—0 Intermediate Contemporary Russian

(4540) Five prepared class periods. Completion of the elementary course with continued emphasis on active use. Texts: Kostomarov, *Russian for Everybody*; Bond, *Russian Graded Readers* (Heath); reference materials.

22—0 Intermediate Contemporary Russian

(Honors)

(4550) Five prepared class periods. A yearlong accelerated course open to students who have successfully completed *Russian 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth-level courses. Texts and reading materials are essentially those of *Russian 20* and *Russian 30*.

30—0 Russian Expression: Conversation and

Composition

(4560) Four prepared class periods. Reading, conversation, and writing. Texts: Galeyeva et al., *Start-II* (Rusky Yazyk — Moscow). Reading materials include selections on Russian culture, history, geography, and Soviet civilization. Students use word processors in their composition work.

40—123 Advanced Russian Composition and Russian Classical Literature

(4571)

(4572) Four prepared class periods. Further work in conversation and writing, and an introduction to the "Golden Age" (19th Century) of

Russian literature with selected readings from Pushkin, Chekhov, Gogol, Tolstoy and other writers. Texts: Muravova, *Verbs of Motion in Russian* (Progress-Moscow).

Students use word processors in their composition work.

- 50—123 The Soviet People, Their Heritage and Literature**
 (4581)
 (4582) Four prepared class periods. Fall Term: RUSSIAN LITERATURE — readings from contemporary and prerevolutionary authors.

Winter Term: SOVIET LITERATURE — an overview tracing the evolution of Russian literature from the Revolution through the war and post-war periods, and including writers in exile. Authors vary according to needs and interests of the class and may include Gorky, Bunin, Sholokhov, Bulgakov, Yevtushenko, Voznesensky, Solzhenitsyn.

Spring Term: THE SOVIET PRESS — a view of Soviet Life and culture as reflected in the media. The text is a subscription to a major Soviet newspaper. Students use word processors in their composition work.

- (9001) **Senior Project**
 (9002) Under the guidance of a member of the Russian Department, a Senior has the opportunity to do special work in Russian. It may include supervised teaching of an elementary class or work chosen in a special field.

Spanish

The Spanish Department offers a six-year course of study. Students who demonstrate unusual ability and interest during the first year are invited to join an accelerated sequence. The language of the classroom is Spanish, and extensive use is made of the language laboratory. Students learn to understand, speak, read, and write the language, and also are given a comprehensive introduction to the literature and culture of Spain and Latin America.

The Department offers various programs of study and travel abroad which enhance a student's language experience. School Year Abroad in Barcelona, Winter Term in Mexico, and the Madrid exchange are some of the possibilities. More information is available through language instructors.

- 10—0 Beginning Spanish**
 (4600) Five prepared class periods. A first-year course designed for those who have not studied Spanish before. The audio-lingual approach is used, stressing understanding and speaking. Text: *¿Habla Español?* and accompanying laboratory manual

(Holt, Rinehart, Winston). These materials are supplemented by language laboratory practice, selected readings, and other audio-visual materials. Exercises in reading and writing are introduced as the student acquires confidence in oral expression.

- 11—0 First Level Spanish**
 (4620) Five prepared class periods. For new students who have been exposed to Spanish but who are not fully prepared for *Spanish 20*. The course stresses the oral use of the language. Text: *¿Habla Español?* and accompanying laboratory manual (Holt, Rinehart, Winston) and selected readings. They are supplemented by language laboratory practice and other audio-visual materials.

- 10-20—0 Accelerated First and Second-Level Spanish**
 (4630) Five prepared class periods. Open to seniors, and to Uppers with permission of Department Chair. A yearlong accelerated introductory course covering two years in one. The basic texts are: *Español en Español*, by Shumway & Forbes (Holt, Rinehart, Winston); *Tres Farsas Contemporáneas y Un Secuestro* (see *Spanish 22*).

- 20—0 Second-Level Spanish**
 (4640) Five prepared class periods. Emphasis is on speaking, reading, simple theme writing, and vocabulary building, including the use of synonyms and antonyms. Oral fluency is stressed in accordance with the principles of the audio-lingual method. The basic text is: *¿Habla Español?* and accompanying laboratory manual (Holt, Rinehart, Winston). Also *Album* (D.C. Heath), an anthology of short stories, is used to supplement the text.

- 22—0 Accelerated Second-Level Spanish**
 (4650) Five prepared class periods. Open to students who have completed *Spanish 10* or *11* with distinction, and to other qualified students with departmental permission. It covers the equivalent of the material of *Spanish 20* and *Spanish 30* and enables honors students to enter *Spanish 40* or *42*. Texts: *Español en Español*, by Shumway & Forbes (Holt, Rinehart, Winston); *Tres Farsas Contemporáneas y Un Secuestro*, by Martínez-Ballesteros, Rubio and Whitehead (Independent School Press) and selected readings. In Spring Term students occasionally read and stage a one-act play in Spanish.

Third Level Courses

Enrollment for *Spanish 30A* is by permission of Department Chair. All other electives may be chosen

in any sequence: they are of equal difficulty, continue the development of all language skills, and are unified by a common grammar syllabus (Couch, McCann, Rodriguez-Walter, Rubio-Maroto, *Una vez más*, Independent School Press).

30A—0 Spanish Language Review

(4660) Five prepared class periods. For students who have successfully completed *Spanish 20*, but need reinforcement in basic language structures. The goals of the course are achieved through the use of an intermediate grammar text, and readings which are selected according to the needs of the students. By permission of the Department Chair.

31—123 Culture and Civilization of the Hispanic

(4671) **World**
(4672) Four prepared class periods. An intermediate course which takes a social-studies approach to the culture and civilization of the Hispanic world. Students must have demonstrated a strong ability for oral and written self-expression and an interest in historical and cultural themes. This course is particularly well suited for the bilingual student.

32—123 Introduction to Literature

(4681) Four prepared class periods. An intermediate course in which students will continue to develop oral and written expression of Spanish through the study of literature. Students will read, discuss and analyze works by Spanish and Latin American authors. The readings, which vary by trimester, include short stories, plays and a novel.

34—123 Conversation and Composition

(4691) Four prepared class periods. An intermediate course which has as its principal goal the development of conversational and writing skills by dealing with topics of a general and contemporary nature.

35—2 Winter Term in Mexico

(4702) Students enrolled in a Spanish course at the 22 level or above may elect to spend the Winter Trimester in Mexico. Students intending to enroll in this course will do special research during the Fall Trimester under the direction of Mr. Couch and other members of the department. Interested students should see their Academic Advisor to be sure that their other courses and their diploma requirements will permit them to be off campus for that trimester. Final approval for participation in the program will be granted by the Dean of Studies.

40—123 Spanish: Language, Literature, Culture

(4711) Four prepared class periods. The purpose of
(4712) the course is to review, refine and expand
(4713) speaking, reading and writing skills and to further the student's interest in the Hispanic world through varied readings in history, literature, and current events.

Students may choose to take the A.P. Examination in Spanish Language. Texts used in the past have been: *Autorretratos*, ed. Durán; *Relatos Simbólicos*, (Heinle & Heinle Co.); *More Practical Spanish Grammar* (Wiley Press); and various selections, literary and non-literary, from print and other media.

42—0 Spanish and Latin American Literature

(4720) Four prepared class periods. The course presupposes an extensive knowledge of grammar and vocabulary and a reasonable fluency in conversation. Emphasis is on written work, discussion and analysis of literary works. Students may take the Advanced Placement Examination at the end of this course if they so desire. Texts: Representative works of Ana María Matute, Unamuno, F. García Lorca, J.L. Borges, Pablo Neruda, and other literary works which complement the study of these major authors.

52—0 Advanced Spanish and Latin American Literature

(4730) Four prepared class periods. The course is open to students who have the equivalent of *Spanish 40* or *42*, or with the permission of the instructor. This course prepares the student for the Advanced Placement Examination in Spanish Literature or Language. The course is an in-depth study of two significant authors each term. In the past the following texts have been used: *Cien años de soledad*, by García Márquez (Editorial Sudamericana, Buenos Aires); *Tres novelas ejemplares y un prólogo*, by Unamuno (Austral); *Antología Esencial*, by Pablo Neruda (Losada); *Obra Escogida*, works of Ana María Matute, Martí and Rubio (Independent School Press); *Cinco Maestros*, by Coleman (Harcourt, Brace and World, Inc.); *Fulgor y Muerte de Joaquín Murieta*, by Pablo Neruda.

60—123 Special Literary and Cultural Topics in Spanish

(4741) Four prepared class periods. Contents vary
(4742) according to the needs and interests of the
(4743) student.

(9001) Senior Project

(9002) Qualified Seniors may undertake projects of
(9003) independent study in Spanish under the direction of a faculty advisor. They may also

do apprentice teaching in beginning classes under faculty supervision.

See also Latin American Studies (History 348) listed under *History and the Social Sciences*.

History and the Social Sciences

To satisfy the Department's diploma requirement, the student must successfully complete four terms of history during the 11th and 12th grades. Normally the requirement is satisfied by taking three terms of United States History (*History 300-T2* and *301*) plus a fourth trimester of a 300-level elective survey beyond *History 301*. This elective-survey requirement encourages students to study non-United States History and social science.

For students so assigned because of their HQT scores (see 2 below), *History 250* counts as the fourth term of the diploma requirement.

Seminars at the 400-level are primarily for Seniors who have already completed their 4-term diploma requirement. However, a 400-seminar may count as the 4th-term requirement if the student has passed two terms of non-United States History or social science during the Junior or Lower years at Phillips Academy (or the equivalent in the 9th or 10th grades at another school) and has scored sufficiently well on the History Qualifying Test.

The History Qualifying Test (HQT) is given to all Lowers during the spring term and then to all new Uppers, Seniors, Post-Graduates, and foreign students during the orientation period in September. The purpose of the test is to place students in the appropriate level of history study:

1) For many, the HQT indicates that the student should begin the 3-term U.S. History sequence (*300 (T2), 301*) in September. Students may, however, wait to begin the *History 300* sequence a term later (in January) or a year later (the following September). All these students are reminded that they may elect the fourth term of the requirement only after they have completed one term of the regular *History 300* sequence.

2) For some, the HQT indicates that the student should begin the diploma sequence by first taking *History 250* (either in the fall or the following spring), and then complete the 4-term requirement by taking the regular 3-term U.S. History sequence (*300 (T2)* and *301*).

3) Finally, for students who have already had a yearlong U.S. History course in the 11th or 12th grade at their previous school, the HQT indicates whether they should take a term of *History 250*, a 300-elective survey, or a 400-seminar to complete the 4-term diploma requirement. Actual placement depends on the individual's previous non-United States History courses, the HTQ score, and the judgment of the department chairman.

There are no required History or Social Science courses at the Junior or Lower Middle levels, but the History Department *strongly recommends* that Juniors take *History 110 (Continuity and Change: An Introduction)*. Juniors who take *History 110* may continue the study of *Continuity and Change* by electing *History 120* and/or *History 130*.

The History Department *recommends* that Lowers take one or more terms of biographical study. Students may select from *History 200, (European)* and *220 (American)*. Although none of these courses counts as the fourth term of the diploma requirement, they are open to Uppers who have delayed taking the regular 4-term diploma sequence. *Reminder:* taking a combination of two or more terms of non-U.S. History as a Junior or Lower will allow a student to move directly from U.S. History to a 400-seminar as a Senior.

Washington Intern Program

The Department co-sponsors, with the Phillips Exeter Academy History Department, a special Spring Trimester (mid-March through late May) Program in Washington for Seniors taking, or who have taken, *History 300-301*, and for Uppers in *History 300*. The program is restricted to 15 Andover students and 15 Exeter students, competitively selected, for work as Interns in the offices of Senators and Representatives. The application process begins early in the previous Fall Trimester. Prospective applicants should avoid taking 0-yearlong courses. Uppers who are interns in the spring will take *History 301* during the fall of their Senior year.

INTRODUCTORY HISTORY COURSES

- | | |
|--|---|
| 110—1
(2011)
110—2
(2012)
110—3
(2013) | Continuity and Change: An Introduction
Five prepared class periods. Primarily for Juniors. An introduction to the study of history and the social sciences, this course focuses on the phenomenon of change in history: why, how, and when change occurs, and the |
|--|---|

ways in which people react to and are affected by it. To accomplish this, three topics are examined: the San Bushmen of the Kalahari Desert, the Black Death and Hiroshima, and the growth of industrialism, using as evidence the textile industry in the local Merrimack Valley. One period per week is devoted to discussion of contemporary issues.

120—2 Continuity and Change: The Pre-Modern World
(2032)

Five prepared class periods. Primarily for Juniors. **Prerequisite:** *History 110*. This course continues the theme of *History 110*, with an examination of further changes, taken from the world of Islam and the Christian Reformation. One period per week is devoted to discussion of contemporary issues.

130—3 Continuity and Change: The Modern World

(2053) Five prepared class periods. Primarily for Juniors. **Prerequisite:** *History 110*. The final course in this series continues the study of historical changes with a focus on the last two centuries. The topics addressed are Darwin and his theory of evolution and the Chinese revolutions of 1911 and 1949. One period per week is devoted to discussion of contemporary issues.

200—23 European Biography

(2102) Four prepared class periods. Primarily for
(2103) Lower. These courses study the lives of men and women who made significant contributions in several fields of endeavor. Biographies are read in the effort to identify personality traits of important leaders and the circumstances which challenged and motivated them. The Winter Term deals with lives of men and women in Europe and Asia from the Middle Ages to the eighteenth century. The Spring Term examines figures — such as Gandhi and Lenin — from the 19th and early 20th centuries. Although the Spring Term's study follows logically from the winter, either term may be taken alone.

220—1 American Biography

(2121) Four prepared class periods. Primarily for Lower. This course focuses on the lives and experiences of individual Americans. Through biographies and/or autobiographies it examines topics such as personal growth, the relationship of individual to society, prejudice, and the "American Dream."

UNITED STATES HISTORY REQUIRED SEQUENCES

250—1 American Biography for Uppers

(2151) Four prepared class periods. For Uppers
250—3 whose HQT scores require a term of prelimi-

(2153) nary history study prior to *History 300* (T2) and 301. The primary difference between *History 250* and the other biography courses is that the readings here are geared to older students and the subject matter is more explicitly related to preparation for the *History 300* sequence. Course materials include: Padover's *Jefferson*; Remini's *Andrew Jackson*; and Oates' *The Fires of Jubilee*; Nat Turner's *Fierce Rebellion*.

300—12 The United States (T2) (a two-term commitment)

300—23 Four prepared class periods. For Uppers and
(2205) Seniors. This course, along with *History 301* and a fourth term (either *History 250*, a 300-level elective survey, or a 400-level seminar, depending on placement) fulfills the four-term history diploma requirement. The first term emphasizes three goals: a survey knowledge of American history through Reconstruction by reading an advanced-level text; the acquisition of skills by daily exercises in reading, note-taking, and writing; and an in-depth study of an organizing theme. The second term emphasizes American industrialization from the post Civil War years to 1940. The three goals of the first term continue, but the variety of readings and writings and the complexity of the materials increase.

301—1 The United States

(2211) Four prepared class periods. For Uppers and
301—3 Seniors. The focus is on twentieth century
(2213) America to the present, with an emphasis on American foreign policy. In this term the writing of a research paper represents a major part of the work. **Prerequisite:** successful completion of *History 300* (T2).

302—12 United States History for Foreign Students

(2221) Four prepared class periods. A course for
(2222) students for whom English is a second language and whose H.Q.T. scores indicate they are not ready for *History 300* (T2). The course emphasizes language skills important to the study of American history and the subject matter focuses on the founding of the republic, constitution building and how the American government works, the westward movement, the Civil War and the coming of urban-industrial, multiethnic America. The intention of the course is to recognize the special needs of the students and to bring them to a level of achievement so they may transfer to the 300/301 sequence in the winter or spring term, if the students wish to be candidates for the diploma. (Mrs. Lloyd)

ELECTIVE 300 — SURVEY COURSES

The following 300-level electives are *survey* intro-

ductions to non-United States areas of the world and to social science disciplines other than history. Any one of these 300-elective surveys counts as the fourth term of the diploma requirement. **Prerequisite:** A student must have completed at least one trimester of *History 300* or have credit for U.S. History from another school before enrolling in a 300-elective survey.

SURVEY COURSES IN THE SOCIAL SCIENCES

310—1 Introduction to Economics

- (2811) Four prepared periods. The course aims to introduce Seniors to the basic principles of economics and their application and relevance to current public policy issues. Students

examine the development of the economies of the U.S. and the world, and are introduced to basic theoretical tools which help them analyze important economic issues. Classes consist primarily of discussions, although there will also be some role-playing exercises, computer simulations, class assignments, debates, guest speakers, films and student reports on their term projects. (Ms. Amster, Dr. Strudwick, Mr. Williams)

315—3 History and Mathematics

- (2833) Four prepared periods. **Prerequisite:** permission of the instructor. This course provides

an introduction to the ways in which mathematics and statistics are employed in the study of history. Attention focuses on three main areas: elementary statistics and data analysis; entertaining historical controversies; and the logic of historical inquiry. To accomplish these purposes, participants do assigned homework problems in mathematics and applied statistics, read exemplary works in the field of quantitative history, and complete a history research project. (Dr. Strudwick)

325—3 Urban Studies Institute

- (2843) Seniors and qualified Uppers who are not involved in year-long courses may elect for their entire spring course program to participate in a ten-week exploration of the American city, including field work six hours each week. Lawrence, Massachusetts, its history and its present shape, its people and their special problems and opportunities, is the focus of study, but the context is drawn through investigation of broad historical, social, and economic issues which affect most of urban America. Lawrence has always been an immigrant city, and one-third of Lawrence's public school students are now of Hispanic background. In addition to their academic course work, students explore a central aspect of urban life by serving as tutors in an intensive

English language training program for a group of these Lawrence children; the tutoring program, which will be designed by Institute students and staff, uses dramatization and one-to-one tutoring to strengthen the children's oral and literary skills. Knowledge of Spanish or familiarity with theatre is useful, but not essential.

All students take a course in Caribbean History and a course in Urban History, as well as a core course introducing developmental psychology and ethnic studies in such a way as to inform and support the fieldwork project. Students meet periodically in evening seminars with outside speakers.

Seven to ten Phillips Academy students will be selected by interview and special application. Seven to ten students from college preparatory courses in Lawrence and Andover high schools will be selected in the same way. Apply to Susan M. Lloyd by December 1. Uppers who are USI participants in the spring will take *History 301* during the fall of their senior year. (Mrs. Lloyd, Mr. Mozo, Mr. Quattlebaum)

SURVEY COURSES IN HISTORY

330—123 Ancient History

- (2301) Four prepared class periods. The course is concerned with Greek and Roman history from the Minoan Period to the beginning of the Medieval Period. Each term represents a

coherent and independent unit. In the Fall Term the survey ends with the world empire of Alexander the Great. The Winter Term covers the period from the beginning of Rome until its transition from Republic to Empire. The Spring Term is concerned with Roman Empire and the transition from Roman to Medieval History. (Mr. Krumpe)

332 Social History of the Middle Ages (Not offered in 1986-87.)

334—123 Modern Europe: A Survey

- (2341) Four prepared class periods. The Fall Term consists of a background survey of the 16th, 17th, and 18th centuries, with particular emphasis on the political, economic, and intellectual revolutions that helped to mold the modern world. The focus of the Winter Term is the period 1800-1900, with continuing attention given to the shaping of modern thought, the emergence of the nation-state, and the effects of industrialism. In the Spring Term, the course covers topics in 20th century Europe; the two World Wars, and their effect; the nature of totalitarianism; the cold war and the rise of the superpowers. Reading is from primary and secondary sources, as well as fiction. Visual materials are used where appropriate. The

full year course has proven to be a good preparation for the Advanced Placement Examination in European History. (Mr. Royce)

336 Tudor England (Not offered in 1986-87.)

337—1 Victorian England: England in an Age of (2371) Expansion

337—2 Four prepared periods. The course is devoted to a study of the major transitions and developments of nineteenth century Britain.

It is divided into three central components: economic and social developments; political movements; and international relations. Since Victorian literature more directly reflects the life and thought of the times than that of any other period of English history, the course includes an examination of those writers whose works were influential in either adapting or describing the minds and institutions of the English people to the changing conditions of the period. These writers include Hardy, Dickens and Marx. (Mr. Richards, Dr. Strudwick)

338—123 The Russian Experience This course, primarily for Seniors, but open to Uppers with (2381) the Instructors' permission, is a survey of (2382) Russian history, literature and culture from (2383) medieval times to the present. In the Fall

Term, the focus is on the development of ideas and institutions in Old Russia and the Imperial period, through much of the 19th century. In the winter, the subject is Russia in Revolution, covering the period 1880-1940, and in the spring attention is given to the Soviet Union since World War II. While any of these terms may be taken alone, students are urged to consider taking all three terms, since the course is taught as a whole, with the second and third terms building on the previous ones to develop the key themes in Russia's past and in particular to address the question of why Russian society has never developed the kind of democratic institutions with which we are familiar. Considerable attention is given to the study of literature. The course examines the significant events and ideas of the Russian past and the reflection of these events and ideas in the fiction and memoirs of authors such as Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov, Gorky, Mayakovsky, Blok, Zamiatin, Babel, Mandelstam, Bulgakov, Solzhenitsyn and Aksyonov. (Mrs. Powell and Mr. Richards)

See also Russian 13 in the Modern Foreign Language section.

341—123 East Asia: China, Japan, and Foreign Relations (Formerly History 340 and History 342.) (2411) Four prepared class periods. The Fall Term (2412) focuses on *Modern China*. After an introduction to traditional China's religions, thought,

and institutions, the course concentrates on events since 1800, emphasizing China's response to the West, and economic, intellectual, and political developments during the 19th and 20th centuries.

The Winter Term emphasizes *Modern Japan*. After an introduction to traditional thought and feudal social structure in Japan, the course looks closely at ideas, events and developments since 1800. Readings are from historical texts, contemporary observers, sociological descriptions and literature, with a special effort to understand the outstanding features of Japanese culture, politics and economics.

The Spring Term deals with *America's Relations with East Asia*. Since the sailing of the "Empress of China" from New York for Canton in 1784, Americans, whether knowledgeable or not, have approached China, Japan, and Korea with passion. On the one hand, hatred (the Red China of Senators McCarthy, McCarran and Knowland, for instance); on the other hand, love (the crowds that mobbed Boston's Museum of Science in 1985 to view "China: 7000 Years of Discovery"). This course seeks to present a balanced introduction to those relations, and, in so doing, to provide foundation for further study. (Mr. Royce)

344—3 Africa and the World

(2443) This course focuses on contemporary issues facing the new nations of Africa, based on an historical analysis of the emergence of Africa from the colonial period. Political and economic development of these countries, the relations between developed and developing states, the emergence of majority rule in Southern Africa, and the role of Africa in the United Nations is studied. Readings include analyses of the issues African nations confront in the modern world, novels about Africa, and speeches and articles by African statesmen. (Mr. McNemar, Ms. Royal)

346—1 The Middle East

(2461) Four prepared class periods. Few if any regions of the world claim a more compelling interest than the Middle East. From its ancient site of half the earth's cultural antecedents, birthplace of three world religions, landbridge of three continents, eternal East-West corridor, and ceaseless crossroads of conquerors, pilgrims, and tradesmen, the Middle East derives a distinctive character of its own. This course traces the region's history from the Arab awakening to the present situation. (Mr. Bunnell)

348—12 Latin American Studies

(2481) Four prepared class periods. For Upper
(2482) Middlers and Seniors. The History and Spanish Departments offer this interdisciplinary course to provide an analysis of social and political

cal structures through the study of their historical and cultural development. The course gives special attention to current developments and United States policies towards these countries. The Fall focuses on the Mexican and Cuban revolutions; the Winter, on Central America. In the Spring, the course is reserved for participants in the Urban Studies Institute. (Mrs. Lloyd)

ELECTIVE 400 — SEMINAR COURSES

These 400-level electives are *seminars* for Seniors. Issue-oriented trimester courses, they meet three hours a week, with an expectation of substantial independent reading and writing. For effective discussion, they are limited to 12 students. **Prerequisite:** either (1) prior completion of the 4-term diploma requirement; or (2) completion of the 3-term U.S. History sequence (300 (T2) and 301) *plus* two trimesters of non-U.S. History in the 9th or 10th grades *and* a high score on the HQT. Occasionally a senior may want to take a 400-seminar prior to satisfying the diploma requirement of an elective 300-survey; such exceptions must be approved by the department chairman.

SEMINARS IN SOCIAL SCIENCES

- 410 The Modern American Presidency (Not offered in 1986-87.)

415—2 American Race Relations

(2932) This seminar investigates the development of racial attitudes in the United States. We first discuss contemporary campus attitudes and then examine the extent to which current concerns have evolved historically, studying the origins of racism in the British colonies, antebellum slavery in the American South, antislavery movements and anti-ethnic restrictions in the North, and the urban migration of blacks and the life of Jim Crow in the 20th century. We look closely at the movement for civil and economic rights during the 1960s and give substantial attention to recent issues—how to reconcile assimilation with separation, Birmingham with Boston, *Brown* with *Bakke*, equality of opportunity with equality of result. A final paper is expected; there is no final exam. (Mr. Williams, Mr. Rogers)

420—3 Issues in Economics

(2943) **Prerequisite:** Successful completion of *Social Science 310*. This seminar investigates public policy issues in the field of economics. Students begin by

studying the history of economic thought, relating it to our understanding of economic development. After examining the works of Adam Smith, John Stuart Mill, Karl Marx, Alfred Marshall, and John Maynard Keynes, the class addresses a series of current policy questions, such as the debates over the budget, tax reform, import restriction, supply-side economics, central economic planning, labor organization, national industrial policy, and the ethical responsibilities of business. Classes center around discussion of the assigned readings. A term paper on an issue of choice is required. There is no final examination. (Dr. Strudwick)

425—1 International Relations: The Present

(2951) Patterns

425—3 This is a seminar on the Cold War with emphasis upon the politics of the world's two superpowers, the United States and the Soviet Union: how they created the United Nations, the Cold War, the many alliances, the nuclear arms race, and the numerous confrontations between themselves and their respective allies; how, too, they prompted the formation of the Third World and repeatedly intervened in its affairs with financial aid, advice, arms, alignments and troops; and finally, some reasons why they continue to perpetuate these massive manifestations of their great power. Textbook and periodicals are employed. (Messrs. Bunnell, Gurry)

- 430 Men, Women and American Culture (Not offered in 1986-87)

440—2 Nuclear Weapons — Proliferation and Responses (Formerly *Social Science 470*.)

(2972) This seminar follows the evolution of and reaction to The Bomb — from the discovery in 1938 of fission on Otto Hahn's table in Nazi Germany, to Hiroshima, the Cuban Missile Crisis of 1962, and the START Talks and cruise missiles and President Reagan's "Star Wars" speech in the 1980's. Historians, chemists, physicists, political scientists, and journalists are among those who tell the story, in lectures, documents, and secondary accounts. Readings include Richard Rhodes, *Ultimate Powers*; Martin J. Sherwin, *A World Destroyed*; Robert F. Kennedy, *Thirteen Days*; and William Ury, *Beyond the Hotline*. The course entails class discussion of the lectures, films, and readings, a research project, and two exams (midterm and final). (Mr. Quattlebaum)

SEMINARS IN HISTORY

450—3 A Social History of Families in America

(2653) This seminar is based on the assumption that the social structure of American Society

is dependent on the nature of the family. Family constitution has changed over time because of immigration, changing sex roles and mores, the creation of the concept of adolescence, and women's liberation among other reasons. This course examines these developments as well as changing relationships between husbands and wives and parents and children from the colonial period to the present. Readings are drawn from primary and secondary sources. Students are asked to write a series of critical essays as well as the history of their family in America. (Ms. Amster, Dr. Taylor)

455—2 The Courts and Constitutional Development, 1935-1985
(2672)

The seminar focuses on the often conflicting rights of individuals and society as decided by the courts in the years 1935-85. What are the legal powers and limits of government to regulate the actions of individuals in the public interest? To what extent may government regulate private businesses relative to working conditions, consumer interests, or the environment? To what extent may the courts act to protect the rights of freedom of speech, press, assembly, and religion; rights against illegal search and seizure; rights of those accused of crimes; and equal rights to vote, education, employment, and housing opportunities regardless of race, religion or sex? The seminar examines the relationships between ethics and social values, political and economic developments, special interest groups, and the development of law. Students analyze the roles of lawyers and judges; legal procedures; the influence of special interests; and the arguments of prosecutors, plaintiffs, and defendants. The readings emphasize the case method by works such as Westin's, *The Anatomy of a Constitutional Law Case*; Kutler's *The Supreme Court and the Constitution*; Lyons', *The Supreme Court and Individual Rights in Contemporary Society*; and, especially, Supreme Court decisions. The basic classroom procedure is Socratic dialogue, and the climax of each student's study is the critical analysis of a constitutional law case. (Mr. Lyons)

460 American Urban History (Not offered in 1986-87.)

The following course is offered because the Academy's Archives are probably the best in American secondary education. Since the course is neither a "300 survey" nor a "400 seminar", it does not count as one of the four trimester requirements for graduation. This tutorial-research opportunity is a unique offering in American secondary schools.

(2692) Topics in the History of Phillips Academy and Abbot Academy

The course involves work in the Phillips Academy and

Abbot Academy Archives on some aspect of the history of the schools; the course introduces the student to the problems of working with the raw materials of history. Permission of the instructor is required for enrollment. (Mrs. Quattlebaum)

Interdisciplinary

All courses are electives. Courses in this section may be taken during more than one trimester unless the individual description indicates to the contrary.

(9502) Basic Study Skills

(9503) Four class periods. This course is designed to help students build effective study skills through understanding more about the learning process. Class discussion focuses on the problems of motivation, concentration and retention. Exercises are designed to work on improvement in each of these areas and to develop proficiency in planning studying time, in developing accurate yet flexible reading comprehension, in taking notes or marking books, and in preparing for exams. This course may be taken for at most one term. (Mrs. Brother)

(9511) Efficient Reading Skills

(9513) Four class periods. Recommended for Upper Middlers and Seniors, this course is designed to teach strategies for increasing reading efficiency and comprehension. It places particular emphasis on techniques for reading textbooks and novels, vocabulary development, and the improvement of comprehension through analysis of assigned readings. This course may be taken for at most one term. (Ms. Brown)

(9522) Language Skills I

Four class period. This course is designed for those students who need supplementary help in overcoming weaknesses in writing, spelling and vocabulary. Specific assignments are geared to the needs of each student. Open only to students who have permission of the instructor. (Ms. Brown)

(9533) Language Skills II

Four class periods. Seniors and Uppers who need help in writing essays and research papers may elect this course for the Spring Term only. Organizational skills, paragraph and sentence structure, and theme development will be reviewed depending on students' individual needs. Students must have permission of the instructor. (Mrs. Brother)

(9601) **Typing**

(9603) This course in personal typing is open to all students; it is designed for beginners to learn the keyboard and basic typing skills. There is no charge, but students must supply their own typewriters. This course does not earn academic credit. (Mrs. DiClemente)

For another course which is interdisciplinary in nature, see Art 311.

Mathematics

The mathematics curriculum is built around a core sequence of eight trimester courses: three of elementary algebra, two of geometry, one of intermediate algebra and two of precalculus topics. The completion of these eight trimesters will satisfy diploma requirements, but an additional trimester is required before entering the calculus. Placement of new students in the appropriate first course is made by the department considering the record in previous schools, the results of a self-administered diagnostic test in elementary algebra which is sent to newly admitted students in the Spring, and the course program chosen by the entering student. In general, algebra courses taken before the eighth grade and geometry courses taken before the ninth grade will not earn placement credit. Examinations to validate first and second year algebra skills are given early in the Fall trimester, at which time students who are incorrectly placed can be shifted to higher or lower level courses.

Students entering with no prior study of algebra start with *Mathematics 10*; those with a partial year of algebra enter *Mathematics 15*. Students entering with a full year of algebra start with *Mathematics 21-1*. If the results of placement testing indicate a need for *Algebra Review*, then students who have not taken geometry start with *Mathematics 19-1* and continue to *Mathematics 21-2*.

New students who have taken one year of elementary algebra and one year of geometry will satisfy diploma requirements by taking *Mathematics 32-1*, *34-2* and *35-3*. Those with a strong background in intermediate algebra may enroll directly in *Mathematics 34-1*. If, on the basis of our testing, the student's algebra skills are weak, then *Mathematics 25-12* may be required before precalculus.

It is generally best to take the College Entrance Examination Board Achievement Test (Level II) in Mathematics near the end of or immediately following *Mathematics 36*.

For students who wish to go beyond the required level, the department offers many electives, some of which lead up to and beyond the Advanced Placement Calculus Examinations of the College Board. The prerequisites of these elective courses should be noted, particularly by students who are involved in Off-Campus Programs.

Hand Calculators

Every student taking Mathematics or Physical Science must have a suitable hand calculator capable of handling square roots, sines, cosines, reciprocals, logarithms and exponents. Any calculator with *sin*, *log* and inverse function keys is adequate for all course use.

COURSES LEADING TO SATISFACTION OF THE DIPLOMA REQUIREMENT:

10—0 Elementary Algebra

(3100) Five prepared class periods. A year-long course for students who have had little or no algebra. Stress is placed on an understanding of the elementary structure and language of the real number system, on the manipulative skills of simplifying expressions and solving first and second degree equations, and on the study and graphing of polynomial functions. Work is done with word problems, inequalities, irrational numbers, and right triangle trigonometry. **Prerequisite:** None.

15—12 Elementary Algebra (T2) (a two-term commitment)

(3154) Five prepared class periods. A two-term course for those new students whose knowledge and skills are not strong enough to enter the one-term *Algebra Review* or *Geometry*. **Prerequisite:** A half to a full year of algebra.

19—1 Algebra Review

(3191) Five prepared class periods. A course for students who enter with a full year of algebra whose knowledge and confidence indicate they need a brief review of algebra. **Prerequisite:** A full year of algebra.

- 21—1 Geometry** (Formerly *Math 20 (T2)*, first term)
(3211) Five prepared class periods. A course for students who have had a strong ninth grade algebra course, but no geometry. This course is a thorough and systematic presentation of synthetic Euclidean geometry. Strong emphasis is placed on the need for precision

and clarity in the writing of formal proofs. **Prerequisite:** A complete course in elementary algebra comparable in coverage to *Mathematics 10-0*.

- 22—1 Geometry** (Formerly *Math 20 (T2)*, second term)
(3221) Five prepared class periods. This course continues the work of *Math 21*, with increased emphasis on the algebraic/numerical aspects of geometry. **Prerequisite:** *Mathematics 21*.

- 25—12 Algebra Consolidation (T2)** (a two-term commitment)
(3254)

Five prepared class periods. A course for new students entering Phillips Academy with one year of algebra and one year of geometry, whose algebra skills are not strong enough for placement in *Mathematics 32* or *34*. The course begins with a comprehensive review of elementary algebra, and concludes with topics in intermediate algebra (as listed in the course description of *Mathematics 32*). Students who do satisfactory work in this course enter *Mathematics 34* in the Spring Term of their first year. Students with a (T2) grade of 2 or lower in *Mathematics 25-12* enter *Mathematics 32-3* in the Spring.

- 31—0 Geometry and Precalculus**

(3310) Five prepared class periods. A yearlong course for entering students who have completed an Algebra 2 course but have not studied geometry. The course covers Euclidean geometry (both synthetic and coordinate) and elementary functions (including polynomial, circular, exponential and logarithmic functions). **Prerequisite:** Credit for one year of elementary algebra and one year of intermediate algebra.

- 32—1 Intermediate Algebra**

(3321) Five prepared class periods. Topics in intermediate algebra, including sets; properties of real numbers; factoring; fractions; exponents; radicals; absolute value; inequality; solutions of linear, quadratic, and radical equations. **Prerequisite:** *Mathematics 22*, or its equivalent.

- 34—1 Precalculus** (Formerly *Math 35 (T2)*, first term)
(3341)

34—2 Five class periods, four prepared and one unprepared. More topics in intermediate algebra, including absolute value and inequality; slopes and equations of lines; introduction to functions, including linear and

quadratic functions; graphing and applications of functions. **Prerequisite:** *Mathematics 32*, or a (T2) grade of 3 or higher in *Mathematics 25-12*.

- 35—1 Precalculus** (Formerly *Math 35 (T2)*, second term)
(3351)

35—2 Five class periods, four prepared and one unprepared. A continuation of the study of functions, including polynomial, exponential, logarithmic, trigonometric and inverse functions. Completion of this course satisfies the diploma requirement. **Prerequisite:** *Mathematics 34* or its equivalent.

35—3 Functions, including polynomial, exponential, logarithmic, trigonometric and inverse functions. Completion of this course satisfies the diploma requirement. **Prerequisite:** *Mathematics 34* or its equivalent.

40—12 Elementary Functions (T2) (a two-term commitment)
(3404)

Five prepared class periods. A two-term course for entering Seniors whose prior work fails to satisfy diploma requirements. Work focuses on a review of the fundamentals of algebra, and the elementary functions. Students with high quality work in the Fall trimester may satisfy the diploma requirements and take *Mathematics 50-23 (T2)*. **Prerequisite:** Credit for three years of high school mathematics.

ELECTIVE COURSES

Only courses with sufficient enrollment will be given.

- 36—1 Precalculus**

(3361) Five class periods, four prepared and one unprepared. Required of students coming from 35 who plan to study calculus. Topics that bridge the gap between algebra and calculus, including circular and trigonometric functions. In the Fall Term, new Seniors who do poorly on in-class testing may be placed in the first term of 40(T2). **Prerequisite:** *Mathematics 35*, or its equivalent.

36—2 Required of students coming from 35 who plan to study calculus. Topics that bridge the gap between algebra and calculus, including circular and trigonometric functions. In the Fall Term, new Seniors who do poorly on in-class testing may be placed in the first term of 40(T2). **Prerequisite:** *Mathematics 35*, or its equivalent.

36—3 Functions, including polynomial, exponential, logarithmic, trigonometric and inverse functions. Completion of this course satisfies the diploma requirement. **Prerequisite:** *Mathematics 34* or its equivalent.

37—2 Discrete Mathematics
(3372) Four prepared class periods. This course provides exposure to some topics from the

areas of discrete mathematics and finite mathematics such as mathematical induction, sequences, series, recursion, and vectors. It also increases mathematical maturity by emphasizing the solution of sustained and demanding problems, thereby strengthening the student's background for studying calculus and other college level mathematics. **Prerequisite:** *Mathematics 36* or its equivalent.

41—1 Probability

(3411) Four prepared class periods. Includes sample spaces, counting problems, sampling,

41—2 conditional probability, random variables, expected value, variance, standard deviation, binomial and normal distributions. The computer

is used on applications that are too time-consuming to perform by hand and to simulate experiments for which there is no model. **Prerequisite:** *Mathematics 35*, or its equivalent.

42—2 Statistics

(3422) Four prepared class periods. Applications of

42—3 various distributions, hypothesis testing, statistical inference and data organization.

(3423) **Prerequisite:** *Mathematics 41*.

50—23 Elementary Calculus (T2) (a two-term commitment)

(3505) Four prepared periods. This course, for Seniors only, does not specifically prepare for the Advanced Placement Examination. The approach to calculus is concrete, informal and applied, as opposed to abstract, deductive, and theoretical. Topics include applications of the derivative and integral to problems of optimization, curve sketching, rate of change, area, volume, and work. Techniques will be developed to apply derivatives and integrals to logarithmic, exponential, trigonometric and inverse functions. **Prerequisite:** *Mathematics 36*, or an equivalent course in trigonometry and elementary functions.

51—1 Elementary Calculus

(3511) Five prepared class periods. For Seniors only. The first of a three course sequence that covers the syllabus for the AB Advanced Placement Examination of the College Entrance Examination Board. Topics covered include: review of functions and graphing, limits and continuity, the derivative and its applications. **Prerequisite:** *Mathematics 36*, or its equivalent.

52—23 Elementary Calculus (T2) (a two-term commitment)

(3525) Five prepared class periods. For Seniors

only. Course finishes the AB Advanced Placement Syllabus. Topics covered include: the definite integral, techniques and applications of integration, and the Fundamental Theorem of the Calculus. **Prerequisite:** *Mathematics 51*.

53—3 Elementary Calculus

(3533) Five prepared class periods. The first of a four-term sequence of courses covering the syllabus of the BC-Advanced Placement Examination of the College Entrance Examination Board. Topics covered include limits and continuity, the derivative and its applications, the Chain Rule, related rates, Rolle's Theorem and the Mean Value Theorem. **Prerequisite:** *Mathematics 36* or its equivalent.

54—0 Calculus

(3540) Five prepared class periods. This yearlong course continues the work of *Mathematics 53* and prepares students for the BC Advanced Placement Examination. Topics covered include theory of the definite integral, techniques and applications of integration, the Fundamental Theorem of Calculus, parametric equations and infinite series. **Prerequisite:** *Mathematics 53* or its equivalent.

55—0 Honors Calculus

(3550) Five prepared class periods. A yearlong course in analytic geometry and calculus which begins only in the Fall. Enrollment is limited to able and committed mathematics students. Satisfactory completion of this course prepares for the College Board BC Advanced Placement Examination. **Prerequisite:** *Mathematics 36* or its equivalent, and departmental permission.

61—23 Calculus Continued (T2) (a two-term commitment)

(3615) Four prepared class periods. The course completes preparation for the College Board BC Advanced Placement Examination, but may include additional topics at the discretion of the instructor. Not open to students from *Mathematics 55* or others with satisfactory grades on the BC Advanced Placement Examination. **Prerequisite:** *Mathematics 52*, or its equivalent. Not offered after 1986-87.

65—0 Calculus of Vector Functions

(3650) Four prepared class periods. For students of demonstrated ability and interest. Vectors and the geometry of 3-space, functions of many variables, partial differentiation, multiple integration, line integrals, Green's Theorem, Stokes' Theorem, linear transformations and matrices. **Prerequisite:** *Mathematics 54*, 55 or permission of the instructor.

68—123 Mathematics Seminar

- (3681) A course for students who have finished
 (3682) *Mathematics 65*. The topics studied will vary
 (3683) according to the needs and interests of the
 students. **Prerequisite:** *Mathematics 65*, and
 permission of the instructor.

COMPUTER COURSES

The Mathematics Department is located in Morse Hall, which also houses two computer rooms. One has 19 IBM Personal Computers (networked) and the other has 12 Apple IIe computers. A variety of computer courses are offered that range from an introduction to computers to preparation for the Advanced Placement Examination in Computer Science. Computer languages taught include APL, LOGO, and Pascal.

Computer Discovering Algebra and the Computer

- 10—1** Four prepared class periods. Designed to
 (3801) complement the learning of elementary
 algebra. Encourages experimentation and
 (3802) mathematical discovery and introduces
 such topics as graphing. No prior pro-
 gramming knowledge is required. A Programming Lan-
 guage (APL) will be used. **Prerequisite:** Concurrent en-
 rollment in *Mathematics 10, 15, 19, 21, or 22*.

Students who desire an introduction to computer programming but who have little or no computer experience normally enroll in *Computer 20* or *Computer 30*. Those who feel confident about their ability to work independently as they learn to program or who expect to enroll in higher level computer courses should choose *Computer 30*. Those who desire an overview of computing as they learn to program or feel that they need more interaction with the computer during class should choose *Computer 20*.

Computer Computer Competence (LOGO)

- 20—1** Four prepared class periods. A one-term
 (3821) course in *programming* in the LOGO lan-
 guage for students with little or no pre-
 (3822) vious experience with computers. The

- 20—3** course focuses on some of the important
 (3823) applications of computers: graphics,
 word processing, and data management.

Topics are introduced with commercial software packages. Then students design and program simplified versions of these packages. Design skills and user-friendly programming are stressed. This course does not qualify a student for *Computer 40* or *50*. **Prerequisite:** None. Not open to students from *Computer 30*.

Computer Beginning Computer (Pascal)

- 30—1** Four prepared class periods. An introduc-
 (3861) tion to structured programming using the
 Pascal language. Standard problem solv-
 (3862) ing techniques and good programming
 style will be introduced in the first half of
 (3863) the course. Text manipulation and num-
 ber manipulation are introduced in the

second half of the course. This course qualifies a student for *Computer 40* or *Computer 50*. **Prerequisite:** *Mathematics 22 (Geometry)*.

Computer Intermediate Computer (Pascal)

- 40—1** Four prepared class periods. For students
 (3901) with programming experience in Pascal.
 (40—2) The course continues the practices and
 (3902) disciplined approach to problem solving
 (40—3) introduced in *Computer 30*. Various stan-
 (3903) dards algorithms such as searching and
 sorting will be introduced. **Prerequisite:**

Computer 30 or permission of the department.

Computer Computer Science

- 50—1** Five prepared class periods. The first
 (3951) term of a year-long course in algorithms
 and data structures using primarily the
 Pascal language. The emphasis will be on programming
 methodology and some standard algorithms. The cur-
 riculum will be guided to a large extent by the Course
 Description of the College Board Advanced Placement
 Examination in Computer Science. **Prerequisite:** *Com-
 puter 30* or permission of the department.

**Computer Computer Science (T2) (a two-term
 commitment)**

- 50—23**
 (3955) Five prepared class periods. Continuation
 of *Computer 50-1*. The emphasis will be on
 data structures and larger programs. This course com-

pletes the preparation for the Advanced Placement Examination in Computer Science. **Prerequisite:** *Computer 50-1*.

Music

The diploma requirement in Music for entering Juniors and Lower Middlers is one trimester of music, which is satisfied by *The Nature of Music (Music 20 or 21)*. This course is also a prerequisite for courses in the History and Appreciation and the Theory categories, but is not a prerequisite for the Applied category. Entering Upper Middlers must take a trimester course in Music or Art at the Academy: *Music 20* or its equivalent.

Entering Seniors need not take a Music course. Exemption from *Music 20* as a prerequisite is granted on the basis of an exam and/or by permission of the Department Chairman. However, there is no exemption from the Music diploma requirement.

APPLIED

15-123 Fidelio Society

(6151) Pass/Fail. Three prepared periods. Open to all classes. This small group of mixed voices (6152) is selected from the *Chorus (Music 17)*. It performs on numerous occasions throughout the year both on *Chorus* programs and on its own. Its repertoire includes music of all types, early and modern, sacred and secular. Membership is by audition and is conditional upon good standing in the *Chorus*. This course, if failed, cannot be made up by examination.

16-123 Band

(6161) Two double periods. Open to all qualified students. Tryouts are held any time before (6162) the beginning of a term to test the student's ability and to arrange for seating. There are some school-owned instruments available for student use. All types of music for wind ensemble are rehearsed. It includes marches as well as classical, popular, and show music. Much sight reading is done, and at least one public concert per term is given. This course, if failed, cannot be made up by examination.

17-123 Chorus

(6171) Two double periods. Open to all qualified students. The *Chorus* is the Academy's major singing group, comprised of mixed voices, (6172) and performs a variety of choral works, both (6173)

sacred and secular. No previous choral experience is necessary; just a desire to work hard and enjoy a unique choral experience. This course, if failed, cannot be made up by examination.

18-123 Chamber Orchestra

(6181) Two double periods. Open to all classes. (6182) Most of the music played is for string orchestra; the best winds in the school are invited (6183) to join for larger works. While *Chamber Orchestra* may be elected as a credit-bearing course, it is also an activity in which all are invited to participate. This course, if failed, cannot be made up by examination.

19-123 Private Instrument and Vocal Lessons

(6191) Two class meetings plus required concert attendance. Lessons are available on all orchestral instruments including, in addition, (6192) piano (classical or jazz), guitar, saxophone, (6193) organ, harpsichord, carillon, and voice.

In addition to practicing daily, the credit students are expected to meet the following commitments: 1) a once per week meeting with their private instructor; 2) a once per week seminar, providing a broader practical/theoretical background (credit students would be assigned seminar groups according to their instrument and background); 3) a required attendance of three concerts, on campus, per term.

There is a charge of \$190 per term for half-hour instruction, or \$280 per term for full-period (50 minute) lessons, and a nominal fee for use of practice pianos and organs. Orchestral and Band instruments are available for rental. **NOTE:** Beginners (as defined by the Department) **MUST** take two consecutive terms of *Music 19* if they are enrolled as credit students. This course, if failed, cannot be made up by examination.

20-1 The Nature of Music

(6201) Five prepared class periods. This course is (6202) designed to give a general background in history, theory, and practical aspects of music. Music from its earliest sources to the present is examined. Also, the role of music and (6203) the arts in each of its cultural stages is studied.

Students receive some first hand experience with musical instruments. No previous experience in music is required.

21-1 The Nature of Music (for Juniors).

(6211) This course covers the same material as *Music 20* (see above), but is designed specifically (6212) for those Juniors whose verbal and writing

- 21—3 skills may be weak. Juniors with no such demonstrated weaknesses may take *Music 20*.
(6213)

HISTORY AND APPRECIATION

The Nature of Music (Music 20 or 21) is a prerequisite for all courses in this section.

26—23 Seminar in the History of Music

- (6262) Two class meetings. Open to Lower and Upper Middlers and to Seniors. This course, taught in seminar fashion, is one where a great deal of reading, listening, and analysis is expected to take place outside the classroom. The composer or composers and era to be studied each term will be decided by the class and the instructor. (Sample topics: Beethoven and the Era of Revolution; The Life, Times and Music of J.S. Bach.) Hours to be arranged.

27—123 Independent Study in the History and Literature of Music

- (6272) Four prepared class periods. Open to Upper Middlers and Seniors. A student who has taken at least one trimester of *Music 26* may, with the permission of the instructor, pursue an independent course of study in either a particular type of music or a particular period of music.

28—3 Jazz

- (6283) Four prepared class periods. Open to Upper Middlers and Seniors. A study of the history of classic jazz, dating back to its roots in Africa, its development in New Orleans, its spreading to New York and Chicago, and its influence on music today. A survey of ragtime, blues, Dixieland, fox-trot, on through the big band era of the thirties, concluding with the jazz rock of today. A study of the influence and contributions of the major personalities such as W.C. Handy, Jelly Roll Morton, Louis Armstrong, Basie, Whiteman, Gershwin and the rest of the greats.

29—3 Opera

- (6293) Four prepared class periods. A study of perhaps the richest of all musical genres and one which lends itself to discussion and analysis. The course will focus, after a brief survey, on four major operas from different periods: typically Baroque, Classical, Romantic and modern. Study will be made of the text, in translation, if necessary, the composer's style, the special relationship between words and music and the background to a performance. Selection will be based on

which operas are being performed in Boston and what is available on film or video.

THEORY

The Nature of Music (Music 20 or 21) is a prerequisite for all courses in this section.

32-23 Conducting

- (6322) Hours to be arranged. Open to Upper Middlers and Seniors. A course in conducting and basic musicianship. This course is designed to give the student an introduction to the conductor's world through developing conducting skills and score analysis.

33—1 Theory of Music I

- (6331) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course offers an introduction to harmonic progression, triads, modes, rhythmic coordination with dictation. Some original work is also expected.

34—2 Theory of Music II

- (6342) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Prerequisite:** *Theory of Music I* or permission of the instructor. This course deals with harmonic progressions, modulations, figure bass, and an introduction to counterpoint and harmonic analysis.

35—3 Theory of Music III

- (6353) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. **Prerequisite:** *Theory of Music II* or permission of the instructor. This course includes advance figure bass, more complex chords, and a brief introduction to nineteenth and twentieth century techniques.

36—1 Electronic Music

- (6361) Four prepared class periods. **Prerequisite:** *The Nature of Music (Music 20)* or permission of the Department Chairman. A course for the benefit of those who seek to expand their domains of creativity by understanding and utilizing the conceptual approaches inherent in electronic music synthesizers and related equipment. Using a practical approach, the course begins with the care and feeding of the tape recorder and proceeds to the functioning and operation of electronic music modules. A lab fee of \$15.00 is charged for the use of the synthesizer.

- 40—123 Advanced Techniques in Electronic Music**
 (6401) Four prepared class periods. Prerequisite:
 (6402) *Electronic Music (Music 36)*. A course de-
 (6403) signed for the continuation of the skills and
 techniques developed in *Music 36*. A lab fee
 of \$15.00 is charged for the use of the synthesizer.

Philosophy and Religious Studies

The Department seeks to initiate students into three distinctive human quests: the search for meaning, the search for justice and the search for the foundation of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered at a variety of levels. All courses involve four prepared class periods.

The department diploma requirement is successful completion of any one-trimester course; this requirement applies only to those who attend Phillips Academy for three or four years, beginning with Juniors and Lowers who enter in September 1983.

- 20—3 The Biblical World View: An Introduction**
 (7203) Four prepared class periods. Open to Juniors and Lower Middlers. Why was the world created? Why are we humans placed on this earth? What are we like? What should we try to achieve in life? How should we treat one another, other creatures, and the planet on which we live? For many centuries the Bible provided for many people a response to such questions. In our day, however, the message has become both unclear and increasingly unfamiliar. In this course we shall look at the composition and the historical setting of the Bible (Old Testament), then read selected passages of Biblical narrative and reflection which introduce persons and principles central to the Biblical view of the world, its inhabitants, and its Creator. (Rabbi Gendler)

- 21—1 Introduction to Ethics: Discernment and Decision**
 (7211) Four prepared class periods. Open to Juniors and Lower Middlers. Rooted in concrete issues and experiences of everyday living this course provides an introduction to the skills of discernment. Drawing case studies from

literary and topical sources, bioethics, law and education, the class will critically investigate the often unspoken presuppositions that give rise to moral decision. (Dr. Avery)

- 23—1 The New Testament Perspective**
 (7231) Four prepared class periods. Open to Juniors and Lower Middlers. The course will consider, in their cultural and historical context, the person and teaching of Jesus of Nazareth, the development of the early Christian community and the religious claims of that community concerning the Christ. (Dr. Avery)

- 24—3 Religious Discoverers**
 (7243) Four prepared class periods. Open to Juniors and Lower Middlers. The experiences of a handful of individuals have exerted an extraordinary influence on the life of the world. These individuals can be called religious discoverers, each of whom has forged a vision of how life should be lived that persons, communities and whole cultures have found compelling for a thousand years or more. We will examine four such discoverers: Jesus, Moses, Muhammad and Buddha. We will study how their lives have provided exemplary models for living for the religious traditions they represent. (Ms. McCaslin)

- 30—1 Introduction to Non-Western Religions**
 (7301) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. This course provides a brief introduction to four of the world's major religions: Islam, Hinduism, Buddhism, and Taoism. Huston Smith's classic, *The Religions of Man*, is the text. Additional readings are drawn from basic religious texts of the traditions. (Rabbi Gendler, Ms. McCaslin)

- 32—2 Post-Biblical Jewish Thought: Responses to the Holocaust**
 (7322) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. An exploration of the holocaust through diaries, memoirs, works of fiction, poetry, and later reflections on the phenomenon.

Questions to be dealt with will include: what was it like for the victims? What was it like for the Nazis? How could it have happened? What elements from Jewish, Christian and secular tradition contributed to its possibility? What have been some of its effects on our own feelings about life and human beings? How have various Jewish, Christian, and secular thinkers responded to the challenge of this event? (Rabbi Gendler)

- 33—1 Varieties of Religious Experience**
 (7331) Four prepared class periods. Open to Lower

33-2 and Upper Middlers and to Seniors. A critical examination of some of the most universal and enduring forms of religious experience: ecstasy, myth-making, ritual expression and the disciplines of meditation and prayer. Concepts and models of understanding are introduced as useful tools with which to approach the phenomena of religion. (Ms. McCaslin)

36-1 Proof and Persuasion

(7361) Four prepared class periods. Open to Lower and Upper Middlers and Seniors. A practical introduction to informal logic and to the philosophical study of language. Some of the questions raised are: What is the difference between a good argument and a poor one? What are the common fallacies of Thought? What are the limitations of logic? What is the meaning of "meaning" and the truth about "truth"? The course stresses the development of individual skill in argument and includes a critical examination of the patterns of thought one encounters every day in magazines, newspapers and on television. (Mr. Hodgson)

41-1 Views of Human Nature

(7411) Four prepared class periods. Open to Upper Middlers and Seniors, and to Lower Middlers with permission of the instructor.
 41-3 A critical examination of selected traditional and contemporary views of human nature with the following questions in mind: Do we have a characteristic nature? What are our basic needs, purposes, rights, obligations and values? To what extent are our actions determined by heredity and instinct? Are we free? Are we responsible for our actions? Do the answers to any of these questions differ for males and females? Given an understanding of human nature, how should we structure society to satisfy our needs and take advantage of our potential? Class discussions and written exercises are designed to encourage participants to develop views of their own against a background of a basic understanding of the readings. These include selections from the *Bible*, selections from the works of Plato, *On Aggression* by Konrad Lorenz, *Walden Two* by B.F. Skinner and *The Politics of Experience* by R.D. Laing. (Mr. Hodgson)

42-23 Bioethics

(7422) Four prepared class periods. Open to Upper Middlers and Seniors. Do our genes determine our behaviour and biology our values? Should we be conducting scientific experiments on live animals and our fellow human beings? How much is a salt marsh worth? Should the government be telling

physicians what they may or may not do? Is there any ethical limit to genetic engineering? What is ethics anyway? Using primary resources written by scientists and physicians, lawyers and philosophers, the course examines these and other issues raised when biology, biotechnology, and ethics intersect. Winter Term will focus on medical issues and Spring Term on biology and the environment. Terms may be taken in sequence or separately. (Dr. Avery)

43-2 Law and Morality

(7432) Four prepared class periods. Open to Upper Middlers and Seniors, and to Lower Middlers with permission of the Instructor.
 43-3 Middlers with permission of the Instructor.
 A critical examination of issues that arise out of the relationship between law and morality. Questions of concern include: For what reasons, if any, should an individual obey or disobey the laws of society? Which kinds of governments (monarchy, aristocracy, democracy, etc.), if any, are legitimate? To what degree should society restrict the freedom of individuals through laws on matters like abortion, pornography, race and sexual relations? Class discussions and written exercises are designed to encourage participants to develop views of their own against a background of basic understanding of the readings. These include selections from the works of Plato, Hobbes, Rawls and Martin Luther King, Jr. (Mr. Hodgson)

44-2 Nonviolence in Theory and Practice

(7442) Four prepared class periods. Open to Upper Middlers and Seniors. The militarily most destructive century in human history, our twentieth century, has also been one in which such men as Gandhi and Martin Luther King, Jr., have successfully applied nonviolence to conflict situations. What is the theory of this approach to human conflict? What are some of its psychological assumptions? What is its religious and human significance? By what means does it operate? What are its prospects for the age ahead? We shall use case histories, the testimonies of those directly involved in such struggles, films, critical and theoretical studies in trying to clarify and comprehend some of these elements of nonviolence. Readings include Joan Bondurant's *The Conquest of Violence* as well as writings of Gandhi and King. (Rabbi Gendler)

45 In Search of Meaning (Not offered in 1986-87.)

Four prepared class periods. Open to all Upper Middlers and Seniors and to Lower Middlers with permission of Instructor. The reflective person is confronted with questions that hunger to be answered yet elude definitive, "objective" answers. The person's faith is often what sustains him/her and provides "subjective" answers

to these fundamental questions. The issues of creation, of death, of evil, of identity, of purpose all challenge one's faith. This course (which takes its title from Victor Frankel's book) will consider these issues from a faith perspective using Scripture, literature (i.e. *Equus*, *No Exit*, *The Little Prince*, *The Shadowbox*, *Man's Search for Meaning*, *I Heard the Owl Call My Name*, etc.) and other materials.

50—3 Existentialism

(7503) Four prepared class periods. Open to Upper Middlers and Seniors. The term "existentialism" covers a broad range of attitudes and values that are joined together by an emphasis on human existence. The authors brought together in its name share a characteristic concern for the problems of meaning, identity and choice that confront men and women in everyday life. The lectures, discussions and readings are designed to help us locate and express these problems as they confront each of us in our own lives and to assist in understanding and resolving them by drawing on the experiences and insights of the major existentialist thinkers. Readings: Nikos Kazantzakis, *Zorba the Greek*; Friedrich Nietzsche, *Thus Spake Zarathustra*; Jean-Paul Sartre, *No Exit and Being and Nothingness*; Soren Kierkegaard, *The Sickness unto Death*; Martin Buber, *I and Thou*. (Mr. Hodgson)

51—1 In Search of Justice: from Socrates to Marx

(7511) Four prepared class periods. Open to Upper Middlers and Seniors. God, emotion, logic, social necessity and economic laws have all been invoked as the final arbiter of justice. (7512) The class will examine the major answers to the problem developed by Plato, Aristotle, Mill, Marx and others. The course aims to assist critical awareness of the ultimate criteria of one's own evaluations and those of others so that she/he be better equipped to make her/his own contribution to the never-ending search for justice. (Dr. Avery)

52—1 Great Philosophers

(7521) The great philosophers challenge us to address difficult and fascinating questions that perenially face mankind: What is the good life? What are the sources of human experience? Is there anything we can know with certainty? Does God exist? What is the relationship between my mind and my body? This course critically evaluates the responses of Plato, Descartes, Hume and Whitehead. (Mr. Hodgson)

Physical Education

All Juniors and new Loweres are required to elect one trimester of *P.E. 10* in addition to their regular athletic commitment.

10—1 Physical Education

(9201) Pass/Fail. Limit of 15 students per section.
10—2 Five class periods per week. A course integrating health and fitness concepts with self-testing and challenge activities;
(9202) 10—3 periods per week are spent using the running track, weight room, ropes course and other areas of the athletic complex. Two class periods are devoted to drown-proofing survival swim technique and C.P.R. training. One period per week is lecture-discussion, requiring some outside reading or other preparation. If the course is failed, the student will repeat it, in full or in part, during a subsequent term. Students should not enroll in this course unless they are able to swim.

Psychology

The Psychology Department offers a variety of elective courses which examine fundamental concepts in the field. Particular emphasis is placed on helping the student explore the interface between psychological knowledge and personal growth. This is accomplished by utilizing teaching strategies which integrate formal academic work with frequent opportunities for student participation and self-exploration. The introductory level courses offer an overview of the fundamental ideas and classic experiments in psychology and consider the complexity of social development. The advanced level courses examine how individuals behave in groups and how healthy relationships are formed and maintained.

32—1 Introductory Psychology

(7021) One double period and two prepared class periods; for Uppers and Seniors. A survey course designed to introduce the student to the complexity and diversity of psychological inquiry. Emphasis is placed on the application of basic psychological principles to in-

dividual experience in order to expand awareness of both self and others. In addition, the broader implications of psychological findings for an integrated understanding of human development and behavior are considered. Topics to be covered may include: psychoanalytic, behavioral and humanistic theories of the person, psychosocial, cognitive, moral and early childhood development, human motivation and personality, abnormal behavior and dreams. Lectures are designed to catalyze discussion. A combination of objective examinations and individualized writing assignments are utilized to evaluate the student's learning. (Dr. Jackson, Dr. Israel)

33—3 Human Sexuality (Not offered in 1986-87.)

Two double class periods; for Uppers and Seniors. This course is designed to help students understand the facts of sexuality from the biological, social and psychological points of view. While there is sometimes a tendency to separate mind from body, the perspective of the course is that mind, body and psyche are all involved in sexuality, often in complex and mysterious ways. In addition to the biological facts, topics to be covered include misconceptions and mythologies of sexual growth and development, masculine and feminine psychology, varieties of intimate relationships and variations in sexual life styles. There is a strong emphasis on discussion in class and self-reflection. In addition, the format of the course includes readings, films, case analysis, quizzes and a final paper. This course, if failed, cannot be made up by examination.

40—2 Human Relationships

(7102) Pass/Fail. One double period and two prepared class periods; for Uppers and Seniors.

40—3 The many dimensions of human relationships are explored. Emphasis is placed on assisting the student to articulate his or her emerging psychological awareness of personal and social relationships. Primary source readings and structured experiential exercises are used to develop an understanding of psychological concepts as rooted in individual experience. Topics to be considered include: core human conflicts, characteristics of the healthy individual in relationship to others, how power, body language and family communication styles shape relationships, and the impact of social structures on intimate relationships. This course, if failed, cannot be made up by examination.

42—2 Group Theory and Process (Not offered in 1986-87.)

42—3 Pass/Fail. Two double class periods; for Uppers and Seniors. The topic for study in this course is human behavior in small groups. Human beings do

most of their living, working and playing in small groups ranging in formality from family to classroom groups. The relationships among the members of these groups develop through similar stages and by common processes which determine to an important extent the effectiveness of the group in achieving its goal. These stages and processes are a response to two basic human needs: the need for belonging and community, on the one hand, and the need for separateness and individual identity, on the other. The classroom group provides students with a laboratory in which to experience and observe group process. Students read articles in the professional literature and write papers on topics that reflect upon their learning. This course, if failed, cannot be made up by examination.

Science

The diploma requirement in science is one year-long course in either biology, chemistry, or physics. However, all students are strongly urged to study in each of these three areas. The order in which biology, chemistry, and physics is taken will have to vary with a student's degree of mathematical sophistication, previous science courses, and interest. Distribution among these sciences may be attained by yearlong courses or term-contained electives. Each department also offers advanced courses for students who wish to add depth to their science studies.

For those students entering as Juniors, the following options exist. We suggest that: 1) those Juniors who have already experienced success in a junior high science course consider taking *Chemistry 25*, *Biology 30*, or *Physics 20*, subject to approval by the appropriate Department Chair; 2) those Juniors who have little science background and who need to develop basic skills should take *Science 10* or *Science 11*; 3) those Juniors who find themselves more interested in studying science in the context of a particular topic should take *Science 12*, *13*, *14*, *15*, *16*, *17* or *18*.

Science Introductory Physical Science

10—2 Five class periods. Open to Juniors with limited backgrounds in science. The course will deal with some of the basic concepts of physics and chemistry by means of classroom work, problem solving, and laboratory experiments.

Science Elements and Compounds

11—1 Open to Juniors and Lower Middlers. Five class periods per week. This course is designed for students who have no background in chemistry. Topics such as elements, compounds, bonding, chemical reactions, acids and bases, the mole concept, and elementary organic chemistry are introduced. Emphasis is placed on developing familiarity with common substances and reactions, and on the use of symbols and elementary mathematics to describe them. There is frequent laboratory work.

Science Introduction to the Geosciences

12—1 Open to Juniors. Four prepared class periods (8021) per week. Laboratory work is accomplished during class periods and involves study of satellite and aerial photos, slides, maps and various specimens. Typical areas of study include volcanoes, fossils, earth resources, oceans, gemstones, crystals and earthquakes.

Science Introduction to Ornithology

13—3 Three prepared class periods and one (double) unprepared laboratory period. Designed primarily for Juniors, the course will cover many of the various orders of Class Aves, concentrating primarily on the songbirds and waterfowl of Eastern Massachusetts. Anatomy, physiology, and behavioral aspects of the winged world be supplemented by laboratory field trips to many of the dynamic bird habitats in the immediate area. The course will culminate with a trip to Parker River National Wildlife Refuge (Plum Island) in Newburyport, Massachusetts, an environment rich in migratory and nesting birds.

Science Natural History

14—1 Four prepared class periods. This is an introductory course designed primarily for Juniors. Through making collections and field observations, students will become familiar with the more common insects, trees, reptiles, birds, rocks, planets and constellations seen in the Andover area. Techniques in observations, collection and preservation will be stressed. Films and slides on the evolution of the living things we study will complement the classroom portion of the course.

Science Oceanography

15—2 Four prepared class periods. This is an introductory science course designed primarily for Juniors. The 70% of our earth's surface comprising the oceans is examined from a number of physical, chemical, and biological perspectives. Accord-

ingly, we investigate aspects of sea-water chemistry, mechanisms of wave propagation and current generation, and interactions among the thousands of living organisms found in or near the sea. Films and slides complement the classroom portion of the course.

Science Ecology

16—2 Four prepared class periods. This is an introductory course designed primarily for Juniors. The course is designed to introduce students to the basic concepts of ecology. The material offered explores the meaning of interdependence and interrelationships within environment; population dynamics; trophic levels and energy; adaptation; succession; and the impact of man upon his environment and some of the problems caused by his use and abuse of basic resources. Class material is coordinated with and reinforced by laboratory studies of population growth, computer programs to study environmental problems and pertinent field trips.

Science Introduction to Zoology

17—1 Four prepared classes per week, one of (8071) which will be used for laboratory work. This is a one-term course designed for Juniors and Lower who have not taken *Biology 25* or *30* or their equivalent. A study will be made of the similarities and differences among the major animal divisions from the most primitive invertebrates to the most complex vertebrates. Areas of concentration will include the basic systems of each phylum (*i.e.*, digestion and reproduction), as well as the ecological role and the evolutionary development of the organism. Lab periods will be used to develop techniques of dissection while studying the anatomy of animals from selected phyla.

Science Introduction to Observational Astronomy

18—3 Four prepared class periods, with one period (8083) each week used for observation. This course is intended for Juniors and Lower who want to become familiar with the universe in which we live. Topics include a survey of the sky, lunar observation, the origin of the solar system, celestial distances and motions, and a brief introduction to stellar evolution. Students identify constellations, track planets, and learn how to observe using a telescope.

Science Observational Astronomy

31—1 Four prepared class periods, with one period (8211) used for observation each week. This course is designed for Uppers and Seniors. Observational astronomy, the study of our solar system and beyond, introduces the most recent developments in planetary and stellar science. Topics such as our sun, the

nine planets, comets, meteors, red giants, white dwarfs, supernovae, black holes, celestial mechanics and NASA's space program will be supplemented with laboratory work, movies and one or two nights a week of required telescope use. Students will have the opportunity to do individual projects of their choice, such as astrophotography. Not open to students who have had *Science 18*.

Science Cosmology

32—2
(8222) Four prepared class periods. This course is open to Uppers and Seniors. Cosmology is the study of the universe as a whole, and its evolution. Topics include galactic structure and large organization in the universe, modern theoretical models, physical evidence, the standard model of the Big Bang, galactic evolution, the search for extra-terrestrial life, and the future of the universe. Telescope observation, movies, guest lectures and a field trip augment the course.

Science Electronics

33—3
(8233) Four class periods per week. **Prerequisite:** previous completion of or concurrent enrollment in a Physics course, enrollment in at least *Math 34*, and permission of the instructor. A course in modern solid state linear and digital electronics leading to a fundamental understanding of microcomputer hardware through consideration of circuit elements and their combinations, operational amplifiers, various types of diodes and transistors, integrated circuits, and Boolean algebra and its implementations. There will be considerable laboratory work.

Science Geology

34—3
(8243) Four prepared class periods, with two periods used each week for laboratory work. A general introduction to physical geology, to include crystal growth, minerals, measurement of geologic time by radioactivity and fossils, volcanoes, seismology and earth structure, deformation of strata, faults, plate tectonics. Some attention to disasters of geological origin, e.g. earthquakes, tidal waves, eruptions.

For other term-contained science courses open to Uppers and Seniors see individual listings in the Biology, Chemistry, and Physics sections of this book.

Biology

The Biology department offers two yearlong introductory level courses, each of which satisfies the diploma requirement for a laboratory science. Each

course meets four times a week for 3 classroom periods and one double-period laboratory session which includes training in the use of the compound and stereoscopic microscopes and other laboratory equipment. Laboratory work requires careful observation, mastery of techniques and accurate recording and interpretation of results. Part of the spring term is set aside for work on individual or group laboratory projects. Juniors who wish to enroll in either *Biology 25--0* or *Biology 30--0* MUST obtain permission from the Department Chairman.

A student entering Phillips Academy as a Lower, Upper, or Senior who wishes to receive Biology credit on the strength of a course taken in the 9th grade at another school may do so upon passing a validation test to be administered after the student arrives at Andover.

25—0 Introduction to Biology

(8420) This course is intended primarily for Lower Middlers with little previous exposure to science. A topics approach usually centered around laboratory experiences is employed in order to acquaint students not only with fundamental biological principles but also with the methods and techniques used to elucidate them. Attention is paid to the processes by which scientific evidence is gathered, interpreted, and summarized. (This course is not open to Seniors.)

30—0 Biology

(8430) This is a survey course for those students with previous exposure to some of the basic principles of science. It stresses the unity of life, rather than the diversity, by emphasizing the functions common to all living things. It covers, in plants, animals, and microorganisms, the fundamental principles of metabolism (including nutrition, gas exchange, materials transport, excretion, and homeostasis), responsiveness and coordination, reproduction and development, genetics, evolution and ecology.

32—3 Biology

(8443) Not open to Seniors. This course covers the same material as the first trimester of *Biology 30-0*. ALL students who enroll in this course MUST also enroll in *Biology 35-12 (T2)* during the following Fall and Winter (see below).

35—12 Biology (T2) (a two-term commitment)

(8454) **Prerequisite:** *Biology 32-3*. This course covers the same material as the Winter and Spring

trimesters of the year-long course, *Biology 30-0*.

The following four term-contained courses are designed for those students who would like to take biology beyond the 25 or 30 level. For those students who wish to take the Advanced Placement Examination, we recommend taking *Biology 41, 43, and 44*. (A year of chemistry and/or physics is also strongly recommended.) These courses, however, are not designed exclusively for students who wish to take the Advanced Placement Examination in Biology. *Biology 25 or 30* or their equivalent, is a **prerequisite** for *Biology 41, 43, and 44*.

41—1 Evolution and Ecology

(8511) Three class periods and one double field or

41—3 laboratory period each week. Evolution is a

(8513) major unifying theme in biology, and the mechanism of natural selection serves as a

foundation for examining ecosystems, energy flow, succession, and relationships between populations. Problems of societal concern such as pollution, population growth, environmental ethics, food supply, and the altering of human evolution will be discussed. A project or a library research paper will be required. (This course, *Biology 43* and *Biology 44*, form an Advanced Placement sequence.)

42—1 Animal Behavior

(8521) Three class periods and one double laboratory period. The course is designed to familiarize the student with the basic principles of

(8522) animal social behavior. The topics which receive the greatest emphasis are: territoriality,

42—3 (8523) altruism, mating strategies, courtship, parental behavior, migration, dominance, and the evolution of behavior patterns. Throughout the course, an effort is made to relate the behavior of animals to the behavior of humans. A project or a research paper will be required.

43—2 Molecular Biology

(8532) **Prerequisite:** *Biology 25* or *30* and one term of chemistry or permission of the instructor.

43—3 (8533) Three prepared classes and one double laboratory period per week. Following a brief review of chemical principles, the course examines the major classes of biomolecules and how they are synthesized and degraded in the cell. Particular emphasis is placed on those reactions which are associated with energy conversion pathways such as respiration and photosynthesis. Enzyme function is considered both in terms of mechanisms of action and with regard to kinetics. The relationship between structure and function at the molecular level is emphasized in studies of the plasma mem-

brane, gene interaction, and control of genetic expression. (This course, *Biology 41* and *Biology 44*, form an Advanced Placement sequence.)

44—1 Human Physiology

(8541) Five prepared classes per week. An in-depth

44—2 consideration of the major systems of the

(8542) human body. All lab work will be done during a two-week period, devoted solely to the

dissection of a cat (or rabbit) and to microscopic slide study of the major tissues of the human body. A fully documented research paper will be required. (This course, *Biology 41* and *Biology 43*, form an Advanced Placement sequence.)

Chemistry

25—0 Introduction to Chemistry

(8620) **Prerequisite:** Completion of *Mathematics 10* or the equivalent. For Lower Middlers, Up-

per Middlers and Juniors with permission of the Department Chair, who have NOT completed their Phillips Academy mathematics requirement. Five class periods per week. An introduction to the chemical view of the material world, including atomic theory, atomic structure, chemical reactions, the nature of solids, liquids, gases, and solutions, acid-base theories, electrochemistry, and the chemistry of the organic compounds. Making connections between chemical principles and everyday life will be emphasized. One or two class periods per week will be devoted to laboratory work.

30—0 Chemistry

(8630) **Prerequisite:** Completion of *Mathematics 22* or the equivalent. Three class periods and

one double laboratory period per week. This course is an introduction to the theoretical framework of modern chemistry, including atomic structure, chemical bonding, phase changes, solutions, chemical reactions, thermodynamics, kinetics, general equilibria, acid-base equilibria, electrochemistry, and aspects of inorganic and organic chemistry. These topics are treated with greater depth than in *Chemistry 25*. Emphasis is placed on developing problem solving skills and understanding the experimental basis of theories.

32—3 Chemistry

(8643) Not open to Seniors. This course covers the same material as the first trimester of *Chemistry*

30-0. All students who enroll in this course *must* also enroll in *Chemistry 35-12 (T2)* the following Fall and Winter (see below).

35—12 Chemistry (T2) (a two-term commitment)
(8654) **Prerequisite:** *Chemistry 32-3*. This course covers the same material as the Winter and Spring trimester of the yearlong course *Chemistry 30-0*.

36—2 Chemistry of the Environment
(8662) Four prepared class periods. Open to Seniors and Uppers. Lower must have the permission of the instructor. This course is concerned with the effect of chemistry on the citizenry. Current issues — such as acid rain, chemical safety, waste disposal, and air and water pollution — are discussed. Chemical theories and principles are introduced as needed. Laboratory work and periodical readings are integral components. Not open to students who have had a year-long course in Chemistry.

41—1 Short Introduction to Chemistry
(8711) Open to Seniors who have not had a year of chemistry. Three class periods and one double laboratory period per week. This course surveys the basic principles of chemistry, such as elements and compounds, periodic table, atomic structure, bonding, general reactions, acid-base chemistry, and simple chemical arithmetic.

42—2 Infrared Spectra and Organic Synthesis
(8722) Hours to be arranged. At least three double periods a week. In this course students learn how to take and interpret infrared spectra. For example, they take the spectrum of varying aqueous dilutions of ethyl alcohol. As the alcohol is purified, the spectra are enhanced. As the students learn synthetic organic methods, they are encouraged to choose their own compounds to synthesize and analyze. Students keep a daily journal of their work in progress.

43—3 Organic Chemistry
(8733) **Prerequisite:** Completion of either *Chemistry 25* or *30*. Three recitation periods, and one double laboratory period. Students interested in medical or biological fields or in additional chemistry must generally wait until the college sophomore year before studying organic chemistry, the chemistry of carbon compounds. This course is a prior introduction to this critically important and fascinating subject.

Organic chemistry is largely non-mathematical and descriptive in nature. Students will use a condensed "minicourse" text, learn many of the laboratory techniques unique to organic chemistry, make use of three-dimensional plastic molecular models, and gain a sound background in nomenclature, functional groups, bonding, simple mechanisms, typical reactions, and infra-red spectra.

46—23 Chemistry of Nutrition
(8762) **Prerequisite:** One year of biology, chemistry, or physics. Four prepared periods per week.
(8763) This course will study carbohydrates, fats, proteins, vitamins, and minerals, with respect to their chemical structure role in the human body, and occurrence in food. As well, the connection between diet and disease will be examined. What is the nature of the relationship between fat and cancer, and fat and heart disease? What is the data underlying the fiber hypothesis, the possible protective role of vitamin A, and the claims for vitamin C? Other topics such as sports nutrition, energy balance, and food additives will also be addressed. A short research paper on some topic of interest will be required.

52—12 Advanced Placement Chemistry (T2) (a two-term commitment)
(8774) **Prerequisites:** *Chemistry 25* or *Chemistry 30* completed with distinction and a year of physics, which may be taken concurrently. Four recitation periods and one double laboratory period. The course is for students who wish to prepare for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

55—0 Honors Chemistry—Advanced Placement
(8780) **Prerequisite:** One year of physics. Three periods for recitation and two double laboratory periods. This course is open to a limited number of able students, by invitation, who have strong scholastic records in mathematics and physics. No prior course in chemistry is expected. It is essentially the equivalent of a first-year college course, and prepares students for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

Physics

20—0 Physics Honors for Juniors
(8800) Four prepared class periods. **Co-requisite:** Registration in *Math 19* or *Math 21*. This is an honors course for talented Juniors with a strong interest and background in science and mathematics. Students entering this course should have mastered a year of algebra as it is used profusely in solving word problems. There is laboratory work. Successful completion of this course prepares students for *Physics 55*. The text is *Physics* from the Physical Science Study Committee.

25—0 Introduction to Physics

(8820) Five class periods, one unprepared. Open primarily to Lower Middlers. An introductory course in the basic concepts of physics. A less rigorous course than *Physics 30*, it is designed for students with latent mathematical maturity. Students should have completed one year of algebra before enrolling. Successful completion of the course prepares the student for the College Board Achievement Test in Physics.

30—0 Physics, A Survey

(8830) Five class periods. **Co-requisite:** registration in at least *Mathematics 32* or its equivalent. A non-calculus physics course for students with ability in mathematics and science. It includes a study of classical mechanics, wave motion, heat, kinetic molecular theory, relativity, geometrical and physical optics, and atomic and nuclear physics, as time permits. Laboratory work is an integral part of the course.

32—1 Physics, A Survey

(8841) This course covers the same material as the

32—3 first trimester of *Physics 30-0*. ALL students

(8843) (other than Seniors) who enroll in this course during the *Spring Trimester* MUST also enroll in *Physics 35-12 (T2)* during the following Fall and Winter (see below).

35—12 Physics, A Survey (T2) (a two-term

(8854) commitment)

Prerequisite: *Physics 32-3*. This course covers the same material as the Winter and Spring trimesters of the yearlong course, *Physics 30-0*.

36—3 Electricity, Magnetism and Electronics

(8863) A five-hour course, four prepared, with laboratory work taking place during the regularly scheduled hours. The course will include static electricity and certain static electrical phenomena such as lightning. Current electricity, simple circuits, magnetism, magnetic effects and some basic concepts of electronics will be included. Lasers, and photodetectors will be discussed if time permits.

52—12 Advanced Placement Physics (T2) (a two-term

(8974) commitment)

Five class periods. **Prerequisite:** An honor grade in *Physics 30* or its equivalent and enrollment in at least *Math 51* or its equivalent. This is a rigorous course in mechanics (Fall term) and electro-statics and dynamics (Winter term). Calculus will be used as required. This course generally prepares candidates for the C-level Ad-

vanced Placement Examination in Physics and entrance to honor level programs in physics at the university level. Text: *Physics*, by Resnick and Halliday.

55—0 Honors Physics — Advanced Placement

(8980) Four prepared class periods and one double laboratory period. Open to talented students who will be enrolled in at least *Math 51*, may have taken a chemistry course and need not have taken any previous physics. If you are interested in this course, you may sign up for it with your academic advisor in the spring or you may request it on your course registration form. The department chairperson will then review your credentials and invite you to join the course or suggest you enroll in *Physics 30*. *Physics 55* prepares students for the C-level Advanced Placement Examination and is a rigorous course emphasizing mechanics and electro-statics and dynamics. Text: *Physics* by Resnick and Halliday.

60—3 Relativity and Quantum Mechanics

(8993) **Prerequisites:** *Physics 30* or *35* and *Math 52*. Four prepared class periods. Relativity and Quantum Mechanics are two theories that completely revolutionized man's thinking about the universe. The course is a survey of the basic ideas underlying these theories. Special mathematical techniques needed for a better understanding of the material are developed in the course.

Theatre and Dance

All courses are electives, open to the various classes as noted. Courses in theatre are designed for students who wish formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work in productions. A variety of experiences is available: some courses result in performance; some courses study theory; some do both. Theatre students are encouraged, though not required, to supplement their classwork by participating in any of the numerous productions mounted each year, or they might be invited to join the Andover Touring Company, which has produced and toured with *Our Town*, *The Fantasticks*, *Scenes from American Life*, *A Thurber Carnival*, *Godspell*, *The Contrast*, *J.B.*, and *The Skin of Our Teeth*.

THEATRE COURSES

21—1 Introduction to Acting

(6511) Four class periods and one hour of movement. Open to all classes. This course is designed for students with little or no acting experience. By doing exercises in movement and voice production, reading, improvisation, and scenes, a student who is curious about the theatre may determine whether he or she has ability or interest in acting, while learning something of the process of characterization, the major responsibility of the actor. The emphasis is on the variety of acting experiences rather than on a polished final product. One required trip to a nearby theatre. Text: Hagen, *Respect for Acting*.

22—1 Public Speaking

(6521) Four class periods. Not open to Juniors. The course has a dual objective: to learn how to speak easily in front of others, and to learn how to speak English well. Students give prepared and extemporaneous speeches on a variety of topics while studying diction, pronunciation, projection, organization, and other techniques of good speaking.

26—13 Technical Theatre

(6561) Two double periods. Open to all classes.
(6563) Through practical experience in designing, building, and lighting for plays currently being produced, students learn the elements of stagecraft, including set construction, stage rigging, and the use of lighting instruments and gels. For the Fall Trimester emphasis will be on stagecraft; for the Spring, lighting.

32—2 Intermediate Acting

(6622) Four class periods. Prerequisite: *Theatre 21*, or departmental permission. Building upon the principles of acting introduced in *Theatre 21*, this intermediate acting course consists of detailed scene work and improvisation, exploring the relationship of the actor to his audience and to his fellow actors and focusing on the creation of dramatic moments, both with and without scripts. The course considers various acting styles, in an effort to guide the actor toward a greater understanding of his responsibility on

stage: to see to what degree he can remove himself from himself while creating truthful characterizations.

51—1 Acting and Directing Workshop

(6711) Two double periods. Prerequisite: *Theatre 21* or 32, or departmental permission. Uppers and Seniors only. The course serves two kinds of students: those who wish as actors to study plays and characters in greater depth and those who wish to study the principles and techniques of directing, the most complex of theatrical tasks. While everyone will do some acting, only those people who express a desire to experiment with directing will do so. Class members work with manageable scenes from classical and contemporary periods, reading theories of acting and directing, studying various performance styles, and examining methods of scene interpretation.

52—123 Play Production

(6721) Four double periods. By audition. This course is oriented toward the performance of a significant work by an important playwright. Recent choices have been *The Sea Gull*, *The Little Foxes*, *Macbeth*, *As You Like It*, *The Hostage*, *Hamlet*, and *Ten Little Indians*.

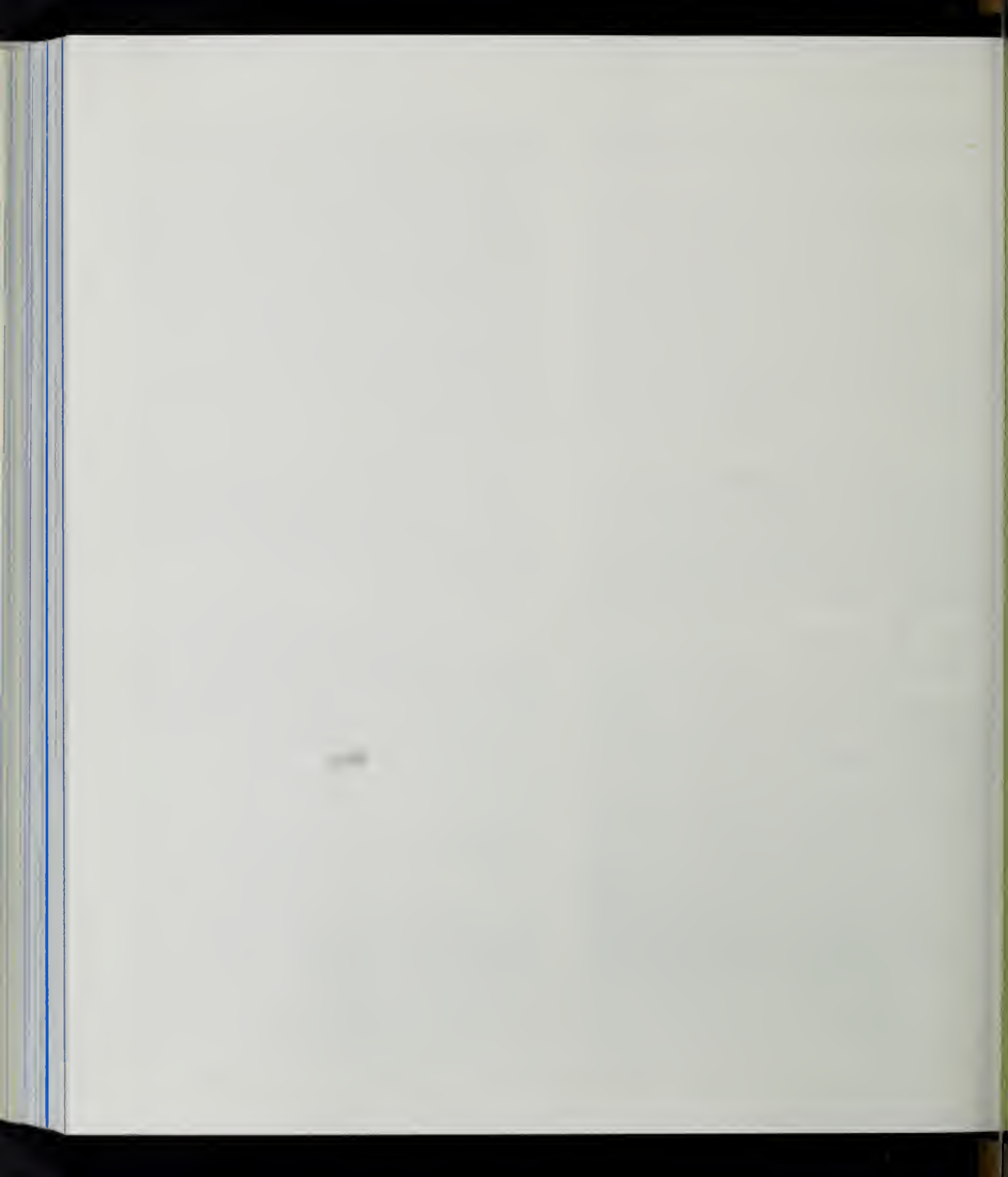
53—2 Playwriting

(6732) Four class periods. Open to Uppers and Seniors. Each student is expected to write at least one one-act play in addition to certain exercises in monologue, dialogue, and scene setting. The class reads aloud from students' work-in-progress while studying the formal elements in plays by important playwrights and by reading selected literary criticism focused on drama.

DANCE

25—123 Introduction to Dance

(6801) Four prepared class periods. Open to all classes. A formal course in movement and composition which introduces the serious student to the vocabulary and other elements of dance through active participation. The emphasis is not ultimately on public performance, but on the process and the discipline of modern dance. (Ms. Brecher)





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